INFANTRY

The Professional Magazine for Infantrymen

May - June 1961

Editorial Department
Lt Colonel J. S. Douglas Editor
Lt Robert F. Sanchez

Production Department
Capt Paul R. Lunsford

Business Office
Mrs. Martha L. Biskup

The Front Cover

(Left to Right) FIRST ROW: 7th "Bayonet" Div, 1st "Big Red One" Div, 3d "Marne" Div; SECOND ROW: 8th "Golden Arrow" Div, 25th "Tropic Lightning" Div; THIRD ROW: 1st "Hell for Leather" Cav Div, 2d "Indianhead" Div; FOURTH ROW: 24th "Victory" Div, 4th "Ivy" Div; FIFTH ROW: 101st "Screaming Eagle" Abn Div, all Armored Rifle Battalions, 82d "All American" Abn Div.

Credits

Art Assistance: Graphics Branch, EPO, USAIS

Photos: U. S. Army Signal Corps unless otherwise stated. Technical assistance by Signal Corps Photo Lab, Fort Benning, Georgia.

INFANTRY is published bi-monthly at the U. S. Army Infantry School by the Book Department, under supervision of the Editorial and Pictorial Office, to provide current doctrinal information on Infantry organization, weapons, equipment, tactics, and techniques, and to provide a forum for progressive military thinking through controversial and thought-provoking articles. Publication of material, however, does not necessarily reflect official thinking or indorsement by the U. S. Army Infantry School.

Subscription Rates: 1 year, $4; 2 years, $7; 3 years, $10. Foreign (non-APO) subscribers 60¢ *per year* postage.

Your subscription will expire as shown by a 3-digit number on your address label. The first two digits show the month; the last digit shows the year. For example, "036" shows March (03) in 1966 (6) as the terminal issue. Please use subscription blank inside the magazine to renew.

INFANTRY

The Professional Magazine for Infantrymen

PUBLICATION OF THE
UNITED STATES ARMY INFANTRY SCHOOL

Vol. 51 May-June, 1961 No. 3

Articles

"The 100 Pipers" ... ... *Capt Marcell G. Swank & Lt Edward L. Smith* 2
Rifle Platoon in the Defense 6
Soviet Army Mortars ... ... *James D. McGuire* 10
Staff Decision at Gettysburg ... ... *Maj Jarvis K. Shafer, Jr.* 13
OVUREP ... ... *Col James H. Hayes* 21
The Old One-Two ... ... *Capt John R. Galvin & Lt Harold C. Lyon* 24
The Orientation Course ... ... *Lt Robert J. McCloy* 27
The Captain Can't Communicate ... ... *Capt Brutus A. Lowery* 30
Guerrillas in Malaya ... ... *Capt G. C. Phipps* 36
What's Your TEQ? ... ... *Lt Col A. E. Seifert* 48
The Assault 52
Laos 54
ICTP-13 ... ... *Capt Robert A. Sullivan* 59
David vs. Goliath ... ... *Capt Jack W. Burkheimer* 60
Minor Changes—Major Results ... ... *Col Samuel T. McDowell* 64

Features

Current Army Aircraft 16
Ranger Training 34
Infantry Around the World 62

Departments

Editorial — This is the Infantry 8
Letters to the Editor 9
Periodic Report 32
Your Infantry Career 44
Tricks of the Trade 47
What's New for Infantrymen 66
The Monthly List 67

Correspondence: Address all correspondence to Editor, *Infantry* Magazine, EPO, USAIS, Fort Benning, Georgia. Please use full address.

Manuscripts: All manuscripts must be accompanied by a self-addressed, stamped return envelope. Acknowledgement within 30 days. Payment upon publication.

Entered as second-class matter 11 June 1948 at the post office, Columbus, Georgia, under the Act of March 3, 1879. Return postage is guaranteed.

From the Secretary of the Army

SECRETARY OF THE ARMY

WASHINGTON

Next month the United States Army will celebrate its 186th birthday, and certainly none of its elements has reason to observe that anniversary with greater pride than does the Infantry, for none has contributed more to the Army's long and illustrious record of service to our country.

The Army won our independence on the battlefields of the Revolutionary War, and during the more than a century and three-quarters since Yorktown, it has successfully defended against every foe the new Nation it helped to establish and build. Throughout the Army's history as a major bulwark of our freedom runs the golden thread of the valor and capability of the Infantryman, who represents the hard core of its strength. From Ticonderoga to the rugged mountains of Korea, he has come to grips with the enemy, and triumphed over him. Countless times, fighting shoulder to shoulder with his comrades of the other combat arms, he has held in his competent hands the fate of America, and, as often, he has proved worthy of the trust imposed in him. Today he stands guard in many parts of the world, visible evidence of our Nation's will and ability to meet and defeat aggression wherever it might occur.

I am mindful that thousands of young men soon to be graduated from colleges, universities, and military academies in all parts of the United States will be commissioned in the Infantry. I tender to them an especially warm greeting as they enter upon the stimulating responsibilities and the arduous life of the Infantry soldier. Because of the nature of its mission, the Infantry places a particularly high premium on men possessed of outstanding courage, superior intelligence, and unalterable determination; on men with the moral and physical stamina to face up to the harshest realities of warfare, and to survive the unprecedented rigors of ground combat in this nuclear age. Above all, it presents a young officer with one of the greatest leadership challenges to be found anywhere.

I am confident that the newly commissioned Lieutenants of Infantry will take up the challenge of the Infantry with vigor and purpose, with pride and dedication, with gallantry and resourcefulness. By so doing, they will gain the respect of our entire Army and Nation, and will earn for themselves the supreme reward of satisfaction in achievement in the performance of a most difficult and demanding job which is vital to the security of our beloved country.

Elvis J. Stahr, jr.
Secretary of the Army

"THE 100 PIPERS"

Capt Marcell G. Swank, AGC
as told to Lt Edward L. Smith, Inf

THE TERMS "large-scale" or "minor" fighting are important only to the historian and the staff planners. To the soldier, these terms are just an exercise in semantics. His view of the fighting is highly personal and emotional—he is the one who gets shot at and, if hit, becomes the statistic. Here is the story of such a soldier describing his feelings during an engagement that history now calls a "minor" action.

A little over 18 years ago, the first United States fighting men landed on the continent of Europe as part of the Canadian force that made the daring raid at Dieppe, France. The assault was planned for various reasons, but the most important were the testing of new landing craft and the landing of armor, and to prove to Hitler and the world that his "impregnable western wall" could be breached. Costly as it was, this raid was the forerunner of another amphibious landing which took place 22 months later on June 6, 1944.

One of the American soldiers was 19-year-old Sergeant Marcell G. Swank. He is now Captain Swank, the Division Trains Unit Personnel Officer for the 1st Cavalry Division in Korea. This is his story as he told it to me.

. . . I was stationed with the 1st Ranger Battalion ("Darby's Rangers") at Shiel Bridge, Scotland. One morning I got the word that I was to attend a British street fighting school in London. I was one of 45 men selected from the battalion and there were six in the group I went with. We were all told to draw ammunition for our M-1 rifles as the British didn't have these weapons and therefore had no ammunition for them.

We travelled by train to southern England and stayed there one day and night. On the morning of August 18, 1942, we were put on buses and taken to an open field. There, Sgt. Lloyd Church and I were attached to the Queen's Own

Cameron Highlanders of Canada. We were put on buses and driven to Brighton on the coast, and shortly thereafter were loaded on British "R" boats (landing craft) in a camouflaged canal. Actually it wasn't until this time that we realized that we weren't going to school. Anyway, we decided we'd better get ourselves an old style helmet (we had been issued the new American helmet a short time before) so that we wouldn't be mistaken for other than "friendly."

That night we started across the English Channel. Church and I slept most of the way but stayed awake long enough to shock the Canadian lieutenant in charge of our boat by asking him what the heck were we doing and where were we going. He couldn't believe that we hadn't been told anything, but finally he gave us a short briefing on our mission. It was to force a landing west of Dieppe at the town of Pourville (Code name Green Beach) and link up with the main effort at Dieppe.

About 0500, I was awakened by an explosion and saw tracers streaking across the sky in front of the boat. As it turned out, it was a battle between a British PT boat and a German E boat. The E boat was sunk, but the element of surprise was lost.

At approximately 0520, our boats lined up in assault waves and started the run for the beach.

Just as dawn was breaking the first artillery shells began falling around the landing craft and the Germans opened up on us with mortars and automatic weapons from the headlands (high ground) on either side of Green Beach. The beach was about 800 yards long and about 50 yards deep from the edge of the water to the sea wall.

Suddenly I heard music coming from my right. I turned to look, and there in the early morning light stood a Highlander, streamers flying from his bonnet, braced against the cabin of one of the craft playing "The 100 Pipers" on his bagpipe. (To the Highlanders, this song would be the equivalent to the 7th Cavalry's "Garry Owen.")

As a child I had heard of the Highlanders being piped into battle. Never did I dream I would see it for myself. For 1000 yards, from the time I first heard the sound until we hit the beach, the piper played. It is the most magnificent moment of my life as a professional soldier.

The seawall was approximately 10 feet high and topped with a walk. At each end and in the center there were German pillboxes. Between the boxes there was concertina wire. There were no mines because it was a wash beach and mines would only be swept out to sea.

By the time I landed, the pillboxes had been taken by the South Saskatchewan Regiment, who were in the first wave, and they had blown a hole through a wire with bangalore torpedoes. We had to go over the wall and through the hole one at a time.

Church and I were assigned to follow a Canadian sergeant because of our lack of a thorough briefing, and our lack of knowledge of the Canadian tactics and organization. The sergeant was killed almost immediately. We were two American "tourists" without a "guide."

We attached ourselves to a platoon that was headed for the Hindeburg (east) Headland. They were to cross over the headland into the town of Dieppe and hook up with Royal Hamilton Light Infantry and the Essex Scottish Regiment making the main assault on Dieppe. We never made it. At one point of resistance we left seven dead.

We held what we had taken, which wasn't much, until we got the word to pull back to Pourville and set up a perimeter defense. This was about 1015. Withdrawal from the beach was scheduled at 1030.

Shortly after we had got set up we were told we would have to hold for another hour as they were having trouble getting the boats ashore. The perimeter was originally 800 yards long and 400 yards deep, and as German pressure increased, the size kept getting smaller.

I positioned myself in some bushes covering a street-corner with a British Bren gunner who was just firing up a storm—at what, I could not tell or see. Finally someone returned his fire and cut the tops off the bushes. They landed on us. At this point the total impact of the morning's action caught up with me and I became very frightened. I lay back looking at the sky (it was a beautiful day) just praying and thinking how much I didn't want to die. After a while I regained my courage and got back into the fight.

Just then, a little lieutenant came running along the line shouting, "You've got to be prepared to fight, lads, you've got to be prepared to fight." My only thought at the time was, "Where the heck have you been all morning?"

Church crawled up behind me about this time and said that they wanted some men to carry back wounded. We each grabbed one and took them back to the center pillbox. The one I had was a Canadian sergeant-major from the South Saskatchewan Rifles. I received a Christmas card from him six years later.

We had no sooner got back to our positions when the word came to withdraw. That's when the going really got rough.

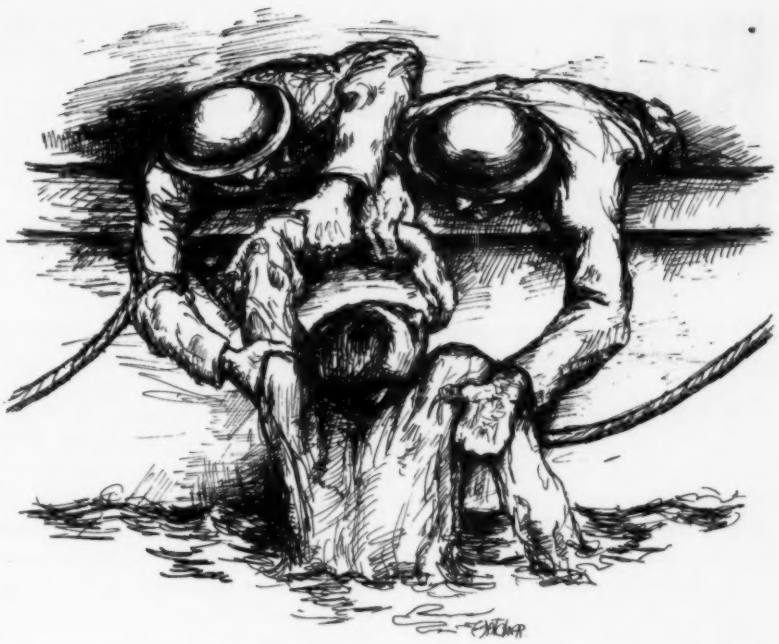
We made it back to the pillbox, but I could see Germans closing in on the two sides and rear. Through the aperture I could see Canadians being cut down as they went over the sea wall and across the beach. We weren't about to be captured, so that left only one choice. We slid through the aperture, dropped down to the beach, and dashed across the sand. The tide had gone out and that meant we had about 50 more yards of open beach to cover. I got to my assigned boat, which was on line with the pillbox, only to find it was stuck in the sand. It was at this time that I noticed Church was no longer with me. I scanned the beach and saw that he was down about half way from the wall. I ran back and dragged him to the base of the wall. He had been hit in the head but was still conscious. I asked him if he could make it. He said, "No." Faced with the question as to whether I should leave him and live to fight another day, or stay and care for him and be killed or captured, I decided I would leave him. This decision hung heavy on my mind for seven years until I saw him again and he assured me that I had done the right thing and that he had never held it against me.

Back at the boat, I joined with the men who were trying desperately to get it into the water. I went from the front to the side to the rear of the craft. Men were falling all around me as the Germans massed their fire at the group clustered around the boat. I decided to get into the boat for protection. I let a Canadian soldier go before me and as his head and shoulders cleared the starboard gunwale, he was killed and fell back on me. Finally there seemed nothing left to do but swim for it.

As I waded away from the boat my legs kept hitting the bodies of fallen Canadians floating in the water. I began shedding equipment for the swim when my rifle swapped ends and the sight hooked onto one of these dead. As I waded, I unknowingly towed him behind me. When I became aware of what was happening, I untangled my rifle sight, field stripped it and scattered the parts. It was a perfectly good weapon and I didn't want it

to fall into the enemy hands. Anyway, as I waded out into deep water with bullets hitting all around me, all I could think of was how much I wanted to live to be old enough to vote—and I still had two years to go for that. After swimming about 200 yards toward a destroyer that was some distance out, I noticed a craft coming from my left and heading out to sea. They must have spotted me for they slowed down just long enough for me to clutch one of the rudder guards. As a lieutenant was helping me up, I was hit in the arm by a bullet that had richocheted off the water. Fortunately he had a good grip on me and managed to pull me onto the rear of the boat. The first thing I saw was the body of a Canadian soldier whose brains were scattered on the deck. I had to crawl over him. When I looked into the boat all I could see was an entanglement of bodies—some living, some dead. I lowered myself into the craft and helped the wounded as much as I could. The boat was riddled with holes and taking water rapidly. We began bailing the blood-reddened water, but it did little good. Finally we had to throw overboard everything and anything that would lighten the load. This included everyone's boots, rifles, packs., etc.

We made it to the destroyer and maneuvered around to the off-side (away from the shore). The ship itself had been taking a terrific beating from the strafing and bombing of the German planes. There was no more room below decks for wounded and they were strewn over the deck under whatever cover could be given them. After each strafing the medics would make the rounds again, pulling shirts over the faces of the men who had been killed and making room for those still living to get some protection.



It was while on board the ship that I was interviewed by Quentin Reynolds who later wrote the book about our action, "The Dieppe Raid."

After supporting the Commandos for two more hours, the destroyer sailed for Portsmouth. I wound up in a hospital there and later rejoined my outfit at Dundee, Scotland. Of the 45 original Rangers who were on the raid, to the best of my knowledge, only nine made the shore. Three were killed, one wounded and captured (Church), and I was wounded. The other four got away from a brilliantly fought sortie against a German coastal battery (Hess) without being hit.

Out of the 4500 troops who actually made the landing (there were more but they never even got ashore), 3300 casualties were sustained between 0535 and 1135 the same morning.

But I think I shall always remember the Canadian troops. They were magnificent, and every time I hear a bagpipe or "The Maple Leaf Forever" (their national anthem), I still get a twinge of pride. I shall never forget those six hours of my life nor shall I ever forget that piper who showed me the greatest tradition of the soldier I have ever known.

WE NEED YOUR IMMEDIATE ASSISTANCE in securing an early increase of 4000 new subscriptions to *Infantry*, and assistance in keeping the new total as a minimum subscriber level. Any one who can send us ten new subscribers will receive his subscription (new or renewed) free. This offer applies in multiples of ten also, so that units can help the drive. You need not use a subscription form; a letter which provides the same information will suffice.

Rifle Platoon in the Defense

This article was prepared for USAIS by the Defense Committee of the Ranger Department, and is entitled Problem 8740.

General Situation: Approximately two weeks ago a combined Aggressor force landed along the coast of South Carolina. At the present time a portion of this force is attacking toward Mobile, Alabama, in an apparent effort to isolate the peninsula of Florida as a base for future operations.

10th Inf Div, stationed at Fort Benning, Ga., has been assigned the mission of establishing a defensive line 25 miles east of Columbus, Ga. Commanding General, 10th Inf Div, has issued his defensive order.

1st BG, 87th Infantry, 10th Division, will defend its assigned area with Companies B, A, C, and D forward in that order from left to right. Co E is in reserve. Co A has attached: 1st Plat, Co E, 2d Med Tank Bn (Patton); 6 armored personnel carriers of the 1st Plat, Co E, 10th Trans Bn; and two short range (AN/PPS-4) radar surveillance teams and one assault weapons squad (SS-10) from the Combat Support Co.

Co A is to organize and defend from the left limiting point in the vicinity of Hollis Creek to the right limiting point in the vicinity of the large draw (Map A). Co B is on the left and Co C on the right. Co A's 1st and 2d platoons are forward, with the 3d platoon in reserve and the weapons platoon in general support.

The terrain in the general area consists of gently rolling hills occasionally traversed by deep draws or high ridges. The small streams in the area are shallow and fordable, except for portions of Hollis Creek. Vegetation consists of thick pine woods with moderate underbrush, and remains practically the same year round. However, there also is an appreciable number of deciduous trees which are bare 6 months of the year.

The 2d platoon, Co A, organizes and defends the right portion of the company front. The platoon area of responsibility (Map B) extends from the west edge of Cyclone Road to the east to include the large draw on the extreme right flank of the company. The Cyclone Road approach and the large draw on the right flank are the responsibility of the 2d platoon. The additional weapons employed within the platoon position by the company commanders and the barrages located forward of the platoon position are as shown on Map B. The 2d platoon is allotted three T-1 night sighting devices. Mutual fire support provided by the 1st platoon, Co C on the right is as shown.

You are Lieutenant, 2d platoon, Co A.

Requirement: Show by the use of appropriate symbols on Map B your plan for the organization of the 2d platoon area to include:

a. Primary squad positions.

b. Firing location, sector of fire, final protective lines or principal direction of fire of the platoon machineguns.

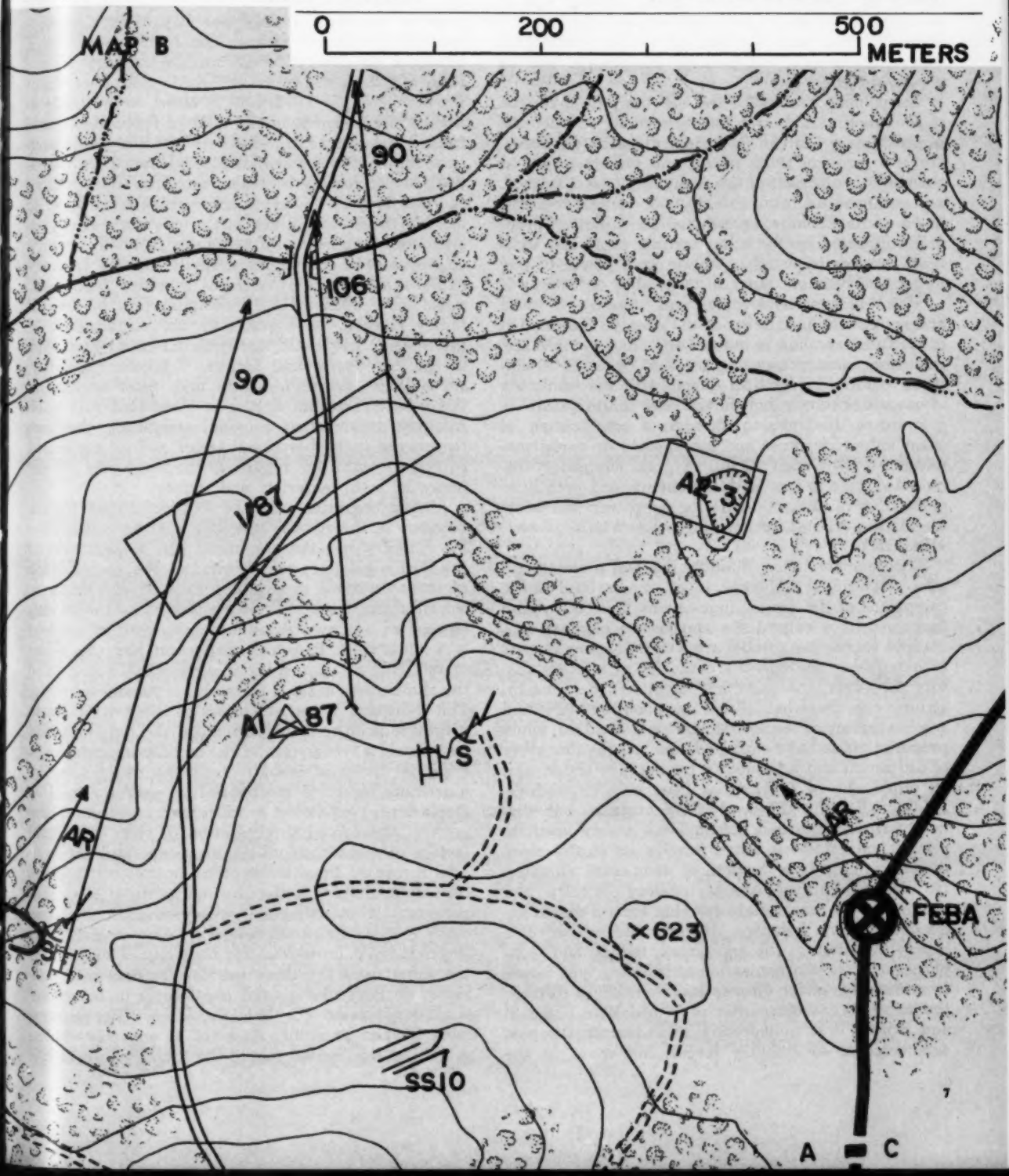
c. Firing location and principal direction of fire of those automatic rifles employed by the platoon leader.

d. Firing location and principal direction of fire of the rocket launcher.

e. Location of the platoon CP-OP(s).

f. The employment of the three T-1 night sighting devices.

g. Recommendations for the location of the three security posts forward of the platoon position as part of the company local security plan. (See Page 56 for a Solution.)



Editorial - - THIS IS THE INFANTRY

THIS month and next, the Infantry will welcome into Service a host of newly-commissioned lieutenants, some for long-term careers and some for short careers. *Infantry* Magazine would like, on behalf of the Infantry School, to make particularly strong its welcome to these young officers, and in so doing to present our version of just what the Infantry is. You may not find quite this phrasing in other publications, but perhaps the change will be a pleasant one.

The primary reason for the US Army is, of course, to provide ground power for the security and defense of the United States. The primary reason for Infantry is to provide brain power and muscle power as the major component of the Army, organized, trained, and equipped for instant strategic or tactical response and sustained combat operations. The Infantry, properly supported by the other combat arms and technical services is, in effect, the ground power of any nation. Its ultimate purpose in combat operations is to defeat enemy land forces and, thereby, to seize and control the land areas of the enemy. The mission of the Infantry, then, is to meet any enemy, any place, any time, under any terrain and weather conditions to force his tactical defeat with the minimum of casualties to our own forces. The Infantryman accomplishes this mission through a combination of great lethal firepower and mechanized or aerial maneuver, and he does all this in great simplicity, dismounted, face to face with the enemy, and with little more than his bayonet-rifle for firepower, his boots for maneuver, and his skin for protection.

HISTORY

Since ancient times, Infantry has had a major and even over-riding influence in all major land battle campaigns of the world. Innovations in mobility and firepower have caused the appearance of more specialized supporting combat arms with varying degrees of importance through the centuries of military history. However, the dominant factor and decisive instrument on these battlefields has been the individual combat fighter of the Infantry. This individual, when properly trained and equipped, has had the flexibility of utilization and a capability for decisive action that no other arm or service has been able to produce. Additionally, the US combat Infantryman has surmounted obstacles and defeated the enemy in arctic regions, mountainous areas, jungles, or on the more livable rolling type terrain of temperate climates. He has vanquished enemy artillery, cavalry and armor, and he has vanquished his most difficult opponent, enemy Infantry. History has recorded a steady evolution in the equipment, tactics, and techniques as well as organization of Infantry type forces from the days of the Greeks and Romans up through the more recent campaigns of World War I and II and Korea. It is unnecessary to reflect on the past achievements of Infantry forces, but more to the point, to consider the present role of the Infantry and its future as far as that can projected into the years to come.

THE CURRENT STATUS OF INFANTRY

With advent of atomic weapons, tactical evolution has pushed rapidly into concepts compatible with this massive increase in firepower capability. Development of the atomic weapon has had an over-riding influence on the battlefield tactical concepts in the form of forced dispersion to negate the effects from the atomic explosion. It has, in effect, been a revolutionary achievement in the field of firepower. Other radical, developmental advances in other fields such as mobility, communications, surveillance and logistics are also rapidly becoming a reality. The Infantry reaction to these technical achievements has been to include these capabilities in its inventory of organizational equipment and recognize tactically, enemy employment of equipment of similar nature. Infantry exploits all scientific successes that are feasible to make more efficient the accomplishment of the Infantry mission. As a result of our visualization of the nuclear battlefield, an optimum balance of each of the key operational factors: firepower, mobility, surveillance, communications and, most important, the Infantry combat fighter is integrated into each Infantry organization echelon, combining the best features of each operational factor and its associated equipment with due regard to the principles of economy in men, materials and money.

Among the three types of divisions presently authorized in the Army—Infantry, Armor, Airborne—the Infantry has the dominant role. Department of the Army guidance which effected the organization of these divisions gave appropriate consideration to the threatened use of atomic weapons by the enemy as well as our own possible employment of nuclear tactical strikes. Required dispersion has the effect of reducing group targets or organizations and even the elimination, in some instances, of combat echelons. The transition of tactical forces of these divisions to a routine posture of dispersion on the battle terrain also forced a recognition of the equally important operational factor of mobility with the mandatory requirement for 100% mechanization and/or airmobile displacement capability by all Infantry elements. Dispersion also forced a recognition of span of control factors in organizational requirements, and the parallel increased importance of command, control and communications facilities. No matter what means of movement to the objective area; by aircraft; by parachute drop or airlanded delivery; or by displacement through rapid cross-country, mechanized maneuver; the Infantry of the three tactical divisions still possesses decisive dismounted capabilities to force tactical decisions in the objective area. The requirement for rapid mobility does not, in any way, downgrade the dismounted role of the Infantry, but rather

extends this capability and insures its accomplishment with stamina, boldness and prompt action. The Infantry is responsive to strategic movement more than any other component of the Army, whether by land, sea or air, with its tactical equipment and logistic support flexible enough to be tailored to any specific operation. The complexity and lethality of modern warfare requires greater Infantry participation in quality and quantity than ever before.

THE FUTURE STATUS OF INFANTRY

In consonance with Department of the Army guidance, transition of combat division organizations is toward a universal or standard combined arms division. The ultimate aim is to provide individual Infantry combat fighters possessing great firepower, mobility and radio communications so that one fighter has a significant combat superiority over three to five of his enemy counterparts. Correspondingly, the division containing a predominance of this type Infantry fighter with essential fire suport and logistical support agencies should be capable of defeating from three to five enemy divisions by utilizing superior men, superior equipment and superior tactical skill. Here, we foresee that the vital operational equipment will provide for the Infantryman this five-fold differential over the enemy. He combines the best that science can produce and primitive Indian or guerrilla techniques to insure victory in close combat.

We of the Infantry like to think in terms of the phrase "One Infantry." It is essentially an extension of the term "One Army" which is now a national image. Our concept of "One Infantry" is essentially this: no matter how an Infantry unit moves to the scene of combat, it becomes indistinguishable from any "other" Infantry at the point of decision, the assault. This is not a matter of bickering for Branch proponency or ascendancy; it is hard fact. As long as we consider the man and his rifle and the job he ultimately performs, then there is but one Infantry. If he rides or flies where others may walk or run, that is fine. Maybe some day we will all ride or fly to the point of decision, but at that point we can interchange and intermingle and nobody, neither friend nor foe, can tell any difference in dismounted Infantrymen. Accepting the thesis, we have only to pursue training to the point where the man who walks can also ride or fly into the old-fashioned, never-changing ground assault.

We try to be flexible in our thinking, to be forward-moving in our activties, and to be fully aware that there is *always* room for new ideas. We need progress, and you, each newly-commissioned Infantry officer, represent potentially great progress. Enter the Infantry with an open mind, an avid interest in improvement, and a willingness to stand up for your judicious beliefs. Make no mistake—your impact will be felt only if you make it felt, and somewhere in your group stand future four and five-star general officers. The Infantry you help to build now will be yours to fight tomorrow. Editor and Staff of *Infantry*

Who's Watching The Store?

• "Quality, Not Quantity" by 1st Lt Robert H. Ratcliff (Dec. 60, Jan-Feb 61) suggests that we recycle trainees missing more than 40 hours of instruction and training. [Hasn't the author] ever heard of KP, driver details, fireman, barracks orderlies, guard duty, not to mention sick call, dental and hospital appointments? [If this system was adopted,] no trainee would finish the cycle he started. . . . Also, the door would be wide open to recycle any slow individuals. Company cadre would not have to work with slow people—just recycle them.

As the commander of a basic training company, I pride myself in the fine job my undermanned cadre does in training the slow-learning individuals, [and I believe that] recycling will only lower their morale and their will to learn.

Lieutenant Paul F. Sinkler
Company D, 5th Bn, 2d Tng Regt
(Basic)
Fort Leonard Wood, Missouri

From the *Bundeswehr*

• . . . I wonder if a translated overseas edition, particularly for those countries who participate in NATO and similar treaties, as well as for those other countries who receive US military aid, would be practicable and/or feasible.

As for myself I can say that all articles of *Infantry* concerned with Soviet doctrine, etc. were translated at Division HQ and given a wide distribution. Other subjects have given me personally many a chance to improve my knowledge and were a stimulant to "try it another way. . . ."

I have said it before and I do not hesitate to repeat it: *INFANTRY* is a fine magazine, worth both it's money and name, as well as the time reading.

Captain Hans Joachim Thiele
4th Panzer Grenadier Div
West German Army
Pastfach 428, Regensburg

As you are aware, we have no money other than that from subscribers, and we have difficulty in paying for what we produce now. It would be virtually impossible to invest in a translated issue unless we had some means by which we could guarantee an appreciable increase in the number of subscriptions to defray the cost. Therefore, the present practice of local translation seems the best solution now.—Ed.

From USAR

• In the October - November 1960 issue of the INFANTRY magazine we noted with extreme interest the article . . . "Prelude to Battle Drill," by 1st Lt Edwin A. Martin, Jr.

We thought Lt Martin and your readers would be interested to note that our Battle Group has adopted the Rifleman's Sequence as part of our training program. We feel that when our troops are thoroughly indoctrinated in this sequence and become completely aware of its importance, the 410th Infantry, and, for that matter, any Battle Group, will achieve a tremendous measure of success toward the goal of the U. S. Army Reserves.

Please extend to Lt Martin my congratulations on his fine article.

James B. Luther
Captain, Inf-USAR
1st Battle Group, 410th Infantry
103d Infantry Division (USAR)
Iowa City, Iowa

We appreciate this compliment regarding one of our articles and are delighted to hear of the enthusiastic implementation of ideas contained in it. We shall, of course, pass this information along to the author.—Ed.

(continued on page 20)

SOVIET ARMY MORTARS

James D. McGuire

COMPARED with today's megaton weapons of mass annihilation, the mortar would appear to be a toy. Yet this "toy," when employed in large numbers, has a devastating effect. During the Korean War, the majority of the casualties suffered by the United Nations' forces were from fragments of Soviet cast-iron projectiles, fired principally by mortars. The Soviet mortars used then by the North Korean and the Chinese Communist armies ranged in caliber from 82mm to 120mm. These same mortars, plus 160mm and 240mm weapons, are standard in the Soviet Army today, and they play an important role in that army.

Not only does the Soviet Army possess more mortars than the United States Army, but it obviously utilizes those of larger caliber. There are good reasons for this. The mortar is a versatile weapon. Its simple construction offers ease of manufacture and allows speeding training of personnel during war. Stripping and assembly require little of the technical training needed to maintain a modern field gun.

The Soviets claim credit for the invention and development of the infantry mortar during the Russo-Japanese campaign of 1904-1905. Actually, today's version must be considered primarily a development of World War I. In 1915, the need for a light, short-range, inexpensive weapon capable of firing a powerful projectile became apparent when the impasse reached by opposing armies resulted in trench warfare. The weapon developed was the mortar and was aptly named the "trench mortar". This was a simple, smoothbore weapon, similar to old guns, and fired a finstabilized projectile. Muzzle loading and absence of breech mechanism not only provided simple construction, but also gave an excellent rate of fire. Modern mortars, while retaining this simplicity and inexpensiveness of manufacture, have developed into highly mobile and powerful weapons.

Prior to World War II, the Soviet ground forces used mortars which

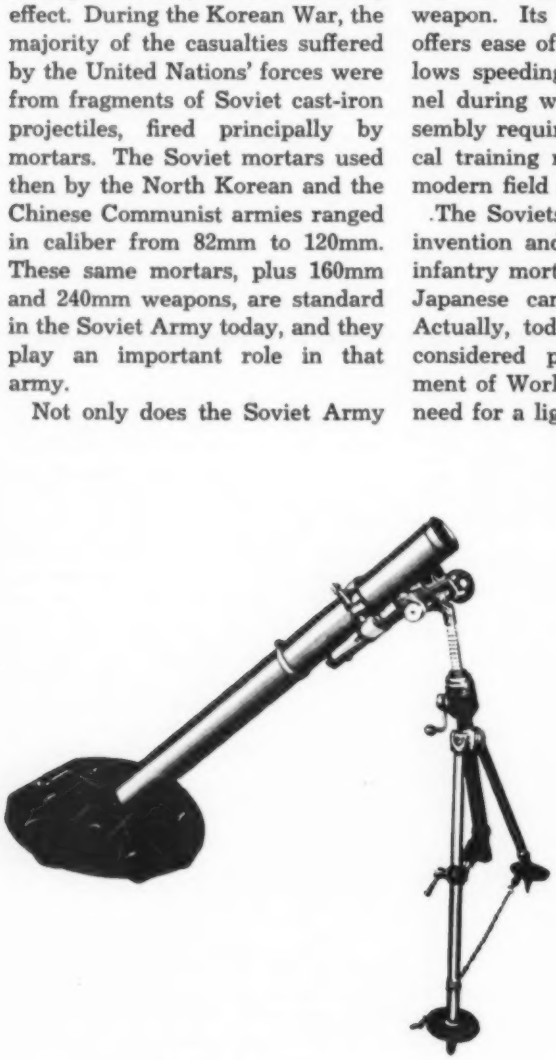


Figure 1
Soviet 82mm Mortar

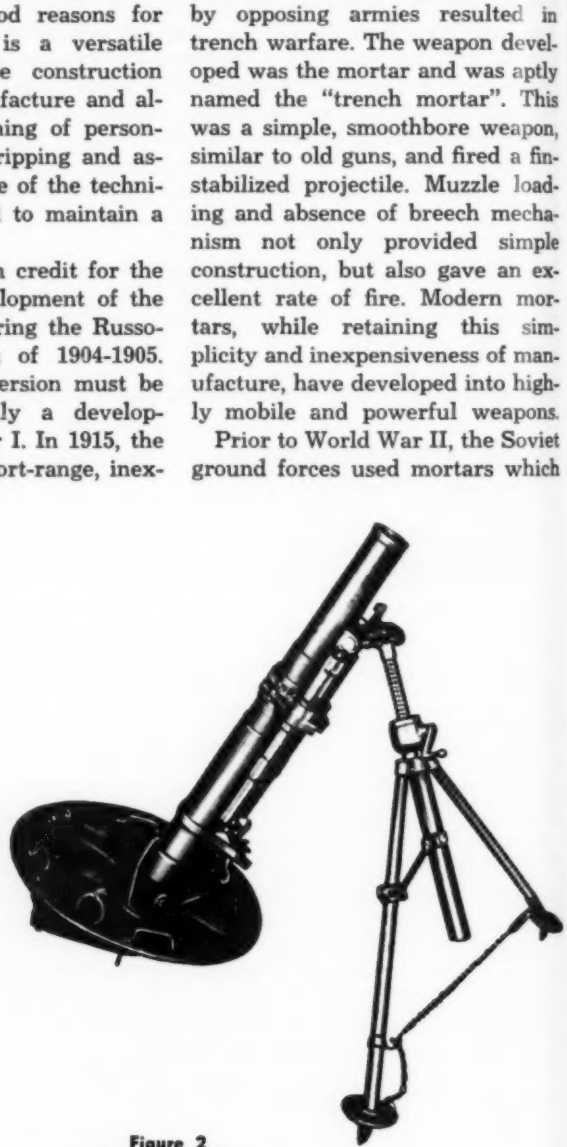


Figure 2
Soviet 120mm Mortar

ranged from 37mm to 120mm, but during the war the 37mm and 50mm mortars were discarded. Today, the 82mm is the only one used as an infantry weapon. The 120mm and 160mm mortars are designated as artillery and are employed tactically in much the same way as light howitzers. The 240mm mortar is used in the same role as medium artillery is used in the United States Army. This breech-loading weapon is capable—caliber-wise—of firing atomic shells. The 400mm self-propelled mortar also has an atomic capability.

82mm Mortar

The 82mm mortar (Figure 1) is a smoothbore, muzzle-loaded, drop-fired weapon. It has three models: the M37, the M41, and the M43, of which the M37 is currently standard. All models fire the same ammunition and have the same ballistic characteristics. Also, all models can fire conventional 81mm ammunition produced by the United States and other countries. The M41 and M43 differ from the M37 in their bipod mount and shock-absorber cylinder. The M41 and M43 differ in that the wheels of the M41 are removed from the folding bipod legs in the firing position, whereas the wheels of the M43 are permanently attached to the rigid cross piece which forms the bipod.

For pack transport, the 82mm mortar breaks down into three loads. Its weight is 123 pounds for the M37, and 128 pounds for the M41 and M43. The maximum horizontal range and maximum rate of fire are 3,325 yards and 25 rounds per minute, respectively. Elevation is 45 to 85 degrees. Ammunition used with the 82mm is high explosive (HE) or smoke. This weapon is found in the mortar company of the rifle battalion.

107 mm Mortar (Mountain Pack)

The 107mm mountain pack mortar (not illustrated) is a muzzle-loaded, trigger-fired weapon. It is apparently a modernization of the 107mm mortar M38. This newer 107mm mortar is bipod mounted, has a wheeled transporter, and can be separated into animal-pack loads. Its weight is estimated to be 900 pounds. Other estimated characteristics include elevation of 45 to 85 degrees, maximum horizontal range of 6,000 yards, and a maximum rate of fire of 15 rounds per minute. It is found only in mountain units.

Figure 3
Soviet 160mm Mortar

120mm Mortar

The 120mm mortar M43 (Figure 2) is a muzzle-loading, smoothbore weapon which is selectively (drop or trigger) fired. Despite its size (it weighs 1100 pounds in traveling order), it can be manhandled short distances. For transport, it has a light, two-wheeled carriage of which there are two versions. Within the last few years a device resembling a muzzle brake has been fitted to the M43 in order to prevent double-loading.

Other characteristics of the 120mm mortar include elevation of 45 to 80 degrees, a maximum horizontal range of 6,230 yards, and a maximum rate of fire of 15 rounds per minute. HE, smoke, and incendiary projectiles are available for use with this mortar. These projectiles are of the conventional teardrop design with stabilizing fins. The HE shells may be made of wrought iron or cast iron. The cast-iron shell, which produces the greater effect against personnel, cannot be fired using the maximum charge. Thus, the maximum range is reduced when using this shell. The 120mm mortar is a regimental artillery weapon.

160mm Mortar

The 160mm mortar M160 (Figure 3) is one of the latest Soviet heavy mortars. It is breech loaded and trigger fired. As a replacement for the 160mm mortar M43, the M160 is much heavier, has a more substantial mounting, and has a greater range. In loading, the tube is released from the base and rotated to a horizontal position. While the tube is in this position, the tray-served round is hand-rammed into the breech end of the tube, which is then returned to a normal position, and the round is fired by a lanyard attached to the trigger. A seven-man crew works this model.

The 160mm mortar weighs 3,240 pounds, and has a maximum horizontal range of 8,800 yards. Its rate of fire is two to three rounds per minute. Only high explosive projectiles are known to be employed with this weapon. The wheels of the M160 remain attached in the firing position.

240mm Mortar

The 240mm mortar (Figure 4)

Mr. McGuire, author of previous articles dealing with Soviet equipment, is Chief, Special Projects Section, Materiel Branch, Technical Division, Office of the Assistant Chief of Staff for Intelligence, Headquarters, Department of the Army, Washington, D. C.

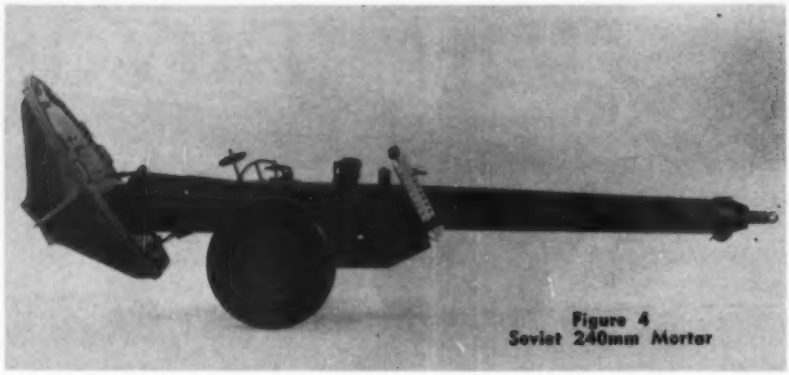


Figure 4
Soviet 240mm Mortar

is a breech-loading weapon which was first shown publicly in 1953. Although it is in the artillery-class, it follows the general design of the M160 and infantry mortars in that it consists essentially of a base plate, a tube with base cap, and a means of elevating and traversing the piece. It is distinguished from other Soviet mortars by its greater bulk and extremely long tube.

An unusual feature of the 240mm mortar is the underside of the baseplate, which is reinforced by ribbing which forms a six-pointed star. The reinforcement of most mortar base plates is irregular in design. Other characteristics include a weight of 9,150 pounds, a maximum elevation of 50 degrees, a maximum horizontal range of 10,600 yards, and a rate of fire of one round per minute. A 300-pound, high-explosive projectile (complete round weight) is used with this weapon. It is also capable of firing an atomic projectile. In a tactical role, the 240mm mortar can supplement medium artillery with either close-support or long-range fire.

400mm Mortar

The most recent Russian development in this field is the 400mm self-propelled mortar (Figure 5), which was publicly displayed in 1957. At first glance, the weapon may be confused with another large-caliber piece, the 310mm self-propelled gun, which is mounted on a similar chassis. The most obvious visual difference between the two is that the recoil mechanism so prominent on the gun is absent from the mortar. Elevation and very limited traverse are probably accomplished by fully powered mechanisms, since no handwheels are evident.

Probable characteristics of this super-caliber mortar include a weight of about 60 short tons, an elevation of from minus to plus 42 degrees, a maximum horizontal range of 23,000 yards, and a rate of fire of one round per minute. This weapon apparently represents initial Soviet efforts toward producing a self-propelled heavy artillery piece capable of firing atomic ammunition as a counter to the United States' 280mm gun. It probably has no great tactical significance, as the Soviet Army now has rockets and missiles of much greater flexibility.

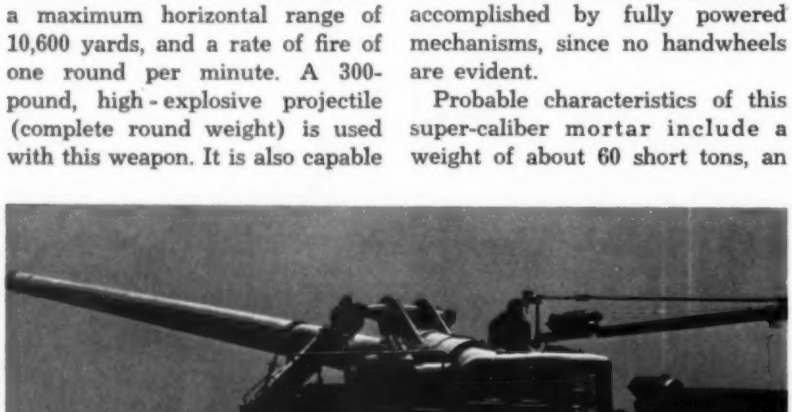


Figure 5
Soviet 400mm Self-propelled Mortar

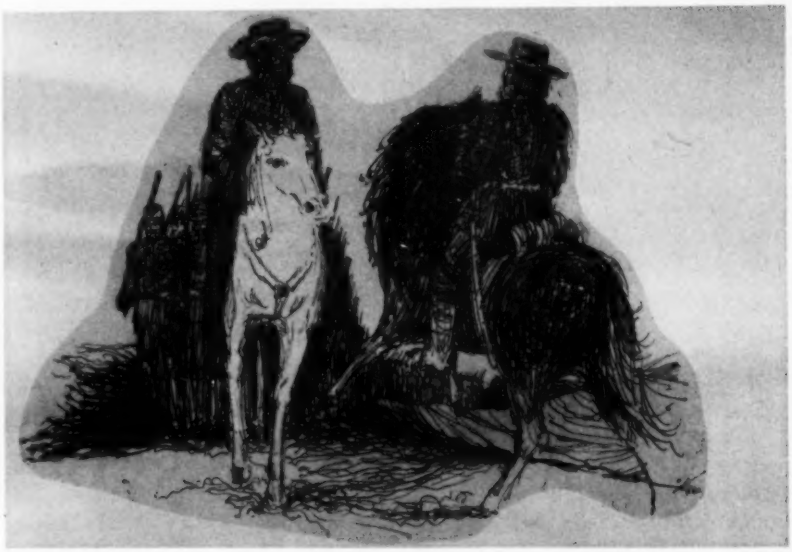
Soviet mortar ammunition is similar in most respects to mortar ammunition of other nations. The standard shells used in the past were teardrop-shaped, equipped with point detonating fuzes, and were fin stabilized. Some of the newer designs used in the 82mm, 107mm, 120mm, and 160mm mortars have streamlined noses. These new rounds are also distinguished by an increase in the number of tail fins. The older 82mm mortar shells, for example, had only six fins; the newer shells have 10 fins.

As with their mortars, ammunition is cheap and easy to manufacture. Types known to be in use are HE fragmentation, HE blast, smoke, leaflet, incendiary, chemical, and illuminating, all using a propelling charge which can be adjusted for desired ranges. The charge consists of ring-shaped or boat-shaped propellant increments and a shotgun-shell type of ignition cartridge. The ring-shaped propellant increments are placed around the fin shaft; the boat-shaped increments are inserted between the fin vanes; and the ignition cartridge is inserted into the fin shaft base. Fuzes are of orthodox design.

The Soviet mortars are effective. Of all the weapons employed by the Communist forces in Korea, the 120mm mortar was the most feared by United Nations personnel. It can be expected that in any future military action, these weapons will continue to play an important role.

Staff Decision at Gettysburg

Maj Jarvis K. Shaffer, Jr, Inf



IT MAY well be that the single most important on-the-spot decision made during the American Civil War was not made by a tactical commander but by a staff officer.

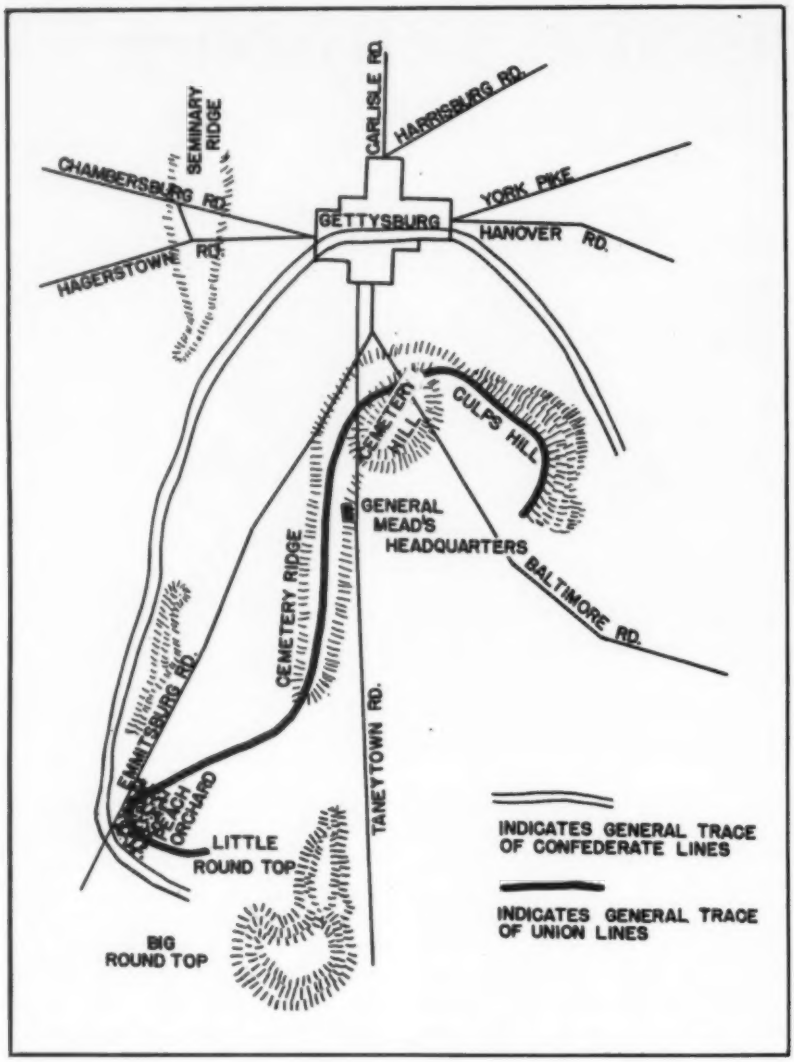
Even with the advantage of hindsight it is difficult to find fault with the unhesitating and decisive actions of Major General Gouverneur K. Warren, Chief Engineer of the Army of the Potomac, on the afternoon of 2 July 1863 at Gettysburg.

General Warren had only recently refused the proffered Chief of Staff post because it was "foreign to my nature," involving too much desk work. It was a fortunate day indeed for the Union cause when he made that refusal. Had he not done so, the Confederate forces of General Robert E. Lee would certainly have "turned the corner" on the south end of the Union's fish hook defense line and rolled up the entire length of it toward the town of Gettysburg. This would have meant another resounding victory for the Confederacy and perhaps the end of an effective Union army. The march of General Lee's victorious army into enemy territory had already had a far reaching and deleterious effect on Union morale. It was frantically essential to the Union cause that the rebel juggernaut be halted somewhere, and soon.

The inconclusive actions of the first day's battle were over. The second day of July began hot and humid as the two vast armies opposing each other across the shallow valley were now committed to decisive combat at this little crossroads town in Pennsylvania.

Even now as General Warren and General George Meade, the recently appointed Commander-in-Chief of the Army of the Potomac, urged their tired mounts toward the Peach Orchard, the ominous silence that is often a prelude to battle indicated that Lee's First Corps under General James Longstreet was about to give the Federal Third Corps more than it could possibly handle in its present untenable position. Although it was contrary to his nature, Warren swore softly under his breath, cursing the day that politicians were permitted to be put in command of tactical units. "Dashing Dan" Sickles had done it again. Instead of keeping his troops emplaced on the extreme southern end of Cemetery Ridge as he had been ordered to do, General Sickles had moved his entire Third Corps across the valley to the Emmitsburg Road without so much as a by your leave, sir. The results presented a provocative salient in the Union line and drastically exposed the southern flank. None too strong initially, it now invited absolute disaster. General Longstreet gleefully accepted the invitation.

As he rode towards the rapidly shaping Peach Orchard battle, Warren looked anxiously over his left shoulder to the southeast and the two hills that dominated the entire Gettysburg area, Big Round Top rising 785 feet and Little Round Top, slightly to the north of it, some 100 feet less. General Meade had told him earlier that he had made a quick reconnaissance of Little Round Top that morning after coming in from Taneytown, Maryland, and had found but a solitary signal man operating a station from that vantage point. Meade had also mentioned that he had dispatched a message to Sickles to have a force occupy boulder strewn Little Round Top. Warren considered bitterly the unlikeliness of that order's being executed. Now he scanned the hillside, hoping to catch a glimpse of a friendly blue uniform. He saw nothing, not even the waving flags of the lone signal man. Only the shimmering heat waves from the



enormous glacial rocks in the late afternoon sun caught his eye.

Without intending to do so Warren suddenly and impulsively dug his spurs into his mount. It was a reflex action triggered by the sudden realization that if that vital ground fell into Confederate hands, the entire Army of the Potomac would find itself in a precarious situation with the imminent possibility of complete defeat.

His horse had charged forward and brought him abreast of General Meade. Warren knew that Meade had already ordered the Second and Fifth Corps to the aid of the vulnerable Third. Realizing that there was little need for him at the Peach Orchard, Warren now yelled to General Meade that he was "going to examine the situation on the left." Meade only nodded in agreement, presumably saving his words for General Sickles.

Although General Warren was apprehensive about the current situation, he also felt a strange stimulation and excitement. Moving back toward Little Round Top was like battling the current of a human river. Units en masse were gravitating toward the Peach Orchard, where the mounting crescendo of battle indicated that Longstreet had moved against Sickles and that the battle was fiercely joined. General Warren recognized the shoulder insignia of the Second and Fifth Corps, for he had designed the insignia for both units. Odd, he thought, that he should feel a sudden surge of pride about such an insignificant thing at a time like this.

Warren was now close to the sloping northern shoulder of Little Round Top, but was not making the speed he desired. He wondered whether the Confederates were at this very moment gathered for the assault on the unprotected little mountain. He compulsively felt that he needed an answer to this immediately, and so he prevailed upon the crew of a passing rifled cannon squad. With much difficulty they moved the cannon to the outer edge of the stream of sweating humanity. At Warren's direction they fired a round at the low spur. The whining of the cannon ball overhead had caused the rebel riflemen lying in wait in that vicinity to turn and casually observe its flight. The glistening of the many bayonets had confirmed Warren's estimate of what was happening.

As he moved up toward the crest of Little Round Top, he could still see the occasional flash of a bayonet in the sunlight. Why did they wait? For what possible reason? Perhaps the flashing bayonets represented only the partial answer. Perhaps at this moment Big Round Top was swarming with rebels about to come screaming down on the Union flank.

It was futile to urge the horse to greater effort on the uphill climb. Warren was thankful when he finally gained the crest of Little

---

MAJ SHAFFER, a 1943 graduate of OCS, has held assignments as company commander in Korea with the 3d Division and in Germany with the 8th and 9th Divisions. A 1951 graduate of the Advance Course, he is now instructor, Combined Arms, Operations Department, QMS, Fort Lee, Va.

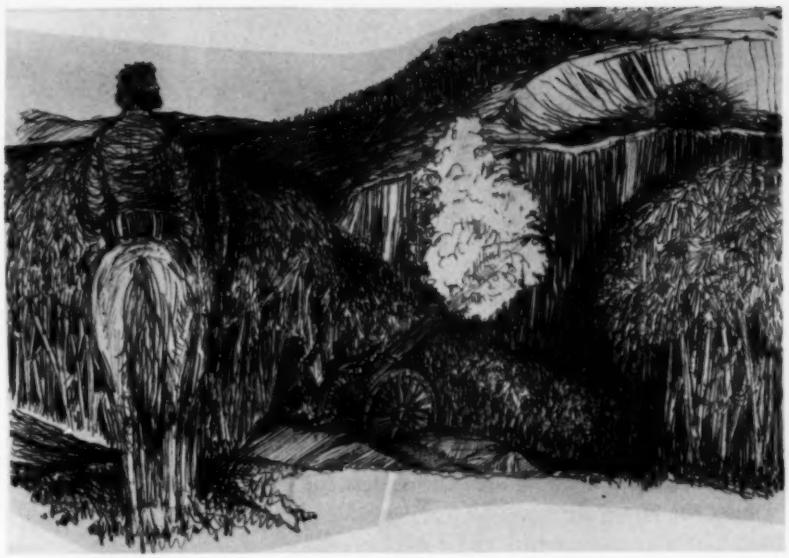
Round Top. But his worst fears were realized. There was no one and nothing there. Not quite true. There behind the huge rock was the lone signal man hurriedly folding up his flags in obvious preparation for departing the area. Warren ordered him to remain and wave his flags to indicate at least that the hill was occupied. Warren then left the lone defender to muse his fate and went plunging down the hillside towards those troops still hurrying in the direction of the Peach Orchard.

Only fleetingly did it enter his mind that he, as a staff officer, had no authority to do what he was about to do. Never once the thought of reprimand or court-martial. Caught up in the moment, he knew only what he had to do, and he was certainly not ignorant of the possible ramifications of his actions.

Reaching the bottom of the hill, Warren quickly pulled from the Peach Orchard movement a battery of rifled cannon from the Fifth Corps Artillery. With peremptory instruction he started the battery towards the summit of Little Round Top and then hastily scribbled a note to General Meade requesting that a division be diverted to the hilltop. He ordered a Fifth Corps captain to take the message to General Meade.

Having performed this, Warren went back up the hill to situate the rifled cannon battery. The battery commander, First Lieutenant Charles E. Hazlett, understood the situation instantly and planted a gun on the summit of the hill. He told General Warren that he normally thought of his unit as giving confidence to Infantry, but with the apparent lack of Infantry, his unit would need considerable confidence in itself. Thirty minutes later he was dead—one of the many who died in the subsequent raging battle.

It now became obvious to General Warren that he could not wait for the division he had requested of General Meade. There was now the whine of the minie ball and occasional cannonball as he scurried about the hillside. Some of the musket fire seemed to be coming from Big Round Top. He wheeled his horse for another trip down the north shoulder and as he did so was struck in the upper left arm by a minie ball. In a detached sort of way he realized that he had been wounded but gave it no further thought.



The gods of war were kind. At the moment Warren reached the bottom of the hill, a regiment of the Fifth Corps commanded by Colonel O'Rorke appeared, moving in a mesmerized manner towards the Peach Orchard. General Warren pulled up alongside O'Rorke, who was leading the column.

"Colonel," he said, "I want you and your men to follow me."

So saying he pivoted his horse and headed up the hill, a route that did not coincide with O'Rorke's planned march route or with his orders. O'Rorke hesitated. General Weed, his brigade commander, had preceded him to the Peach Orchard.

Warren noticed the hesitation and understood. He came pounding back to O'Rorke.

"I want you to know, Colonel, that I assume full responsibility for what I'm doing and will so inform General Weed."

Union and Confederate Infantry arrived on Little Round Top almost simultaneously. Effectively utilizing rocky ledges and boulders, the Union defenders slipped into hasty positions scant minutes ahead of their attacking foe. The two lines' meeting in this manner amongst the rocks resulted in some of the most vicious close combat in military history. As the fight raged on, Union troops gravitated toward it as they had earlier moved toward the Peach Orchard, where the Third Corps was now painfully withdrawing to its former position.

General Warren remained on Little Round Top until he was certain the hill was secure. Suddenly his arm ached. He had forgotten the wound. Now he felt the first tentative throbs of pain as a messenger from General Meade pulled up and informed him that the General wanted him at Cemetery Hill—for engineering advice, as it turned out. For the last time he guided his tired horse down the north slope of Little Round Top. This time he let the horse move at his own pace and find his own way. The battle had been won.

CURRENT ARMY AIRCRAFT

To the soldier in the field not assigned to or directly associated with an aviation unit, it is perhaps a bit difficult to keep up with the Army's current inventory of aircraft. With this in mind, *Infantry* presents the following information concerning rotary and fixed wing aircraft on hand or undergoing test for possible use by the Army.

H-13 "SIOUX"

A single-engine helicopter incorporating a two-blade main rotor and two-blade tail rotor with conventional control system, the H-13 is the Army's standard observation class helicopter. Used extensively at the Army Aviation School, Fort Rucker, Alabama, as a primary helicopter flight trainer, and by combat units for reconnaissance, emergency medical evacuation, command liaison, wire laying, and resupply in the combat zone and training therefor. It has a skid-type landing gear with ground handling wheels installed and provisions for attaching two litter pods on the landing gear cross tubes outside the aircraft. Carries a pilot and passenger inside, or pilot and two litter patients. Its speed is 59 knots and it has a range of 125 miles. Powered by a vertically mounted six cylinder horizontally opposed piston type engine; has a rotor diameter of 35.1 feet, is 41.4 feet long, 9.5 feet high, and 8.6 feet wide.

H-21 "SHAWNEE"

A large single-engine helicopter, the H-21, like the H-34, is one of the Army's two standard light transport class helicopters. It is assigned primarily to transportation helicopter companies and used to transport supplies, equipment, personnel, small units, and for aero-medical evacuation within the combat zone. The H-21 has won acclaim with the Army in accomplishments while participating in civil disaster operations and world record-breaking endurance flights. It is powered by a 9 cylinder, radial, piston-type engine. It is equipped with two main loading doors, has a rotor diameter of 44 feet, is 86.3 feet long, 39 feet wide and 15.4 feet high overall. Carries a pilot, co-pilot, and from 10 to 20 troops, depending upon the equipment they carry and distance to be hauled; pilot, co-pilot and 12 litter patients, or pilot, co-pilot and about 3000 pounds of cargo. Its maximum speed is over 100 knots and its range 200 miles.

HU-1A "IROQUOIS"

An 8-10 passenger single turbo-shaft engine helicopter stressing maximum mobility including features of aero-medical aviation; low-silhouette; air transportability; internal and external cargo capability, and day, night and instrument operation. This helicopter is designed to perform air cavalry missions or suppressive fire missions as a weapons carrier, carry troops and supplies during air mobile operations and perform all types of utility, command, liaison, communications and aero-medical evacuation missions primarily at division and corps levels.

H-19 "CHICKASAW"

This is the Army's standard utility class helicopter. It is a single-engine helicopter incorporating a three-blade main rotor and two-blade tail rotor. Used extensively by combat units to transport supplies, equipment, personnel, small units, and for aero-medical evacuation in the combat zone. Carries a pilot, co-pilot and seven passengers; pilot, co-pilot and six litter patients, or about 1800 pounds of cargo. Its speed is 80 knots and range is 200 miles. Powered by a nine cylinder radial piston-type engine mounted in the nose and inclined aft 35 degrees. Main rotor diameter of 53 feet, 62.3 feet long, 46.1 feet wide and 15.3 feet high.

H-23 "RAVEN"

A single-engine helicopter, the H-23 is an observation class helicopter. Used extensively by the Army as a helicopter pilot primary flight trainer, the aircraft is also assigned to some Corps of Engineer units as well as Reserve component and non-combatant units of the Army in continental United States. Powered by a vertically mounted 6 cylinder horizontally opposed piston type engine and has a rotor diameter of 35 feet, 40.5 feet long, 9.8 feet high, and 10 feet wide. Used for reconnaissance, evacuation of wounded, command liaison, wire laying and resupply. Carries a pilot and passenger inside or pilot and two litter patients in pods attached to cross tubes outside of aircraft. Speed is 59 knots and range is 125 miles.

H-34 "CHOCTAW"

The H-34 is one of the Army's two standard light transport class helicopters. Assigned primarily to transportation helicopter companies and used to transport supplies, equipment, personnel, small units, and for aero-medical evacuation within the combat zone. It is a large single-engine, all metal helicopter. Won acclaim in 1956 when Army aviators established three world helicopter speed records over a closed course at Bridgeport, Connecticut. Powered by a 9 cylinder radial, piston type engine mounted in the nose, facing aft, and inclined 35 degrees from horizontal. It incorporates a single cabin door for loading, has a rotor diameter of 56 feet, is 65.8 feet long, 40 feet wide and 15.9 feet high overall. Carries a pilot, co-pilot and from 10 to 18 troops depending upon the equipment they carry and distance to be hauled; or pilot, co-pilot and about 3000 pounds of cargo. Maximum speed is over 100 knots and range is 200 miles.

HC-1 "CHINOOK"

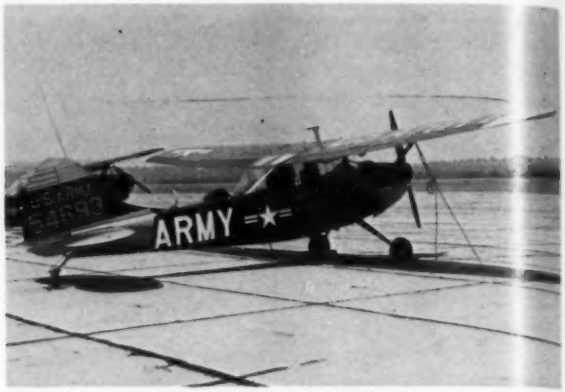
A twin turbo-shaft engine, multi-passenger helicopter capable of carrying cargo loads internally up to three tons and externally over six tons for short distances. It will transport troops and their equipment in mass formation during air mobile operations, perform emergency evacuation of wounded in litter configuration and perform other transport missions on the battlefield where prepared landing areas are not available. This helicopter, now being developed, will be assigned to company size aviation units normally operating at the corps and field army level. It will be capable of operations during day, night and under instrument conditions.

H-37 "MOJAVE"

A giant twin-engine all metal helicopter, incorporating a five-blade main rotor and four-blade tail rotor, the H-37 is the Army's standard medium transport class helicopter. This machine is designed for tactical transport and cargo operation. Transportation helicopter companies use these aircraft. Powered by two 18 cylinder twin-row, radial piston type engines mounted in nacelles at the tips of a short high wing. Largest helicopter in the Army inventory. Fuel is carried in wing and nacelle tanks. Lower portion of the nose of the fuselage consists of "clam shell" type cargo loading doors and a cargo loading ramp. Can accommodate 36 fully equipped troops, 24 litters, or equipment up to a 105mm howitzer, plus one-quarter ton trailer inside its fuselage. Instead of these internal loads can carry up to 10,000 pounds of cargo in an external sling which may be attached to the floor of the fuselage.

AO-1 "MOHAWK"

A twin turbo-prop engine, fixed wing airplane featuring maximum maintainability, rugged construction, visibility, short take-off and landing characteristics and capable of day, night and instrument operation. This aircraft, now being tested, is designed to penetrate enemy-held territory for the purpose of seeking targets and information of the enemy by visual, photographic and electronic sensory means.



L-19 "BIRD DOG"

An observation type airplane used primarily by Infantry, Artillery and Armored units. This is the Army's standard fixed-wing light observation class aircraft. Equipped with flaps, fixed landing gear and steerable tail wheel to permit maximum efficient operation from small, unimproved landing fields in the immediate vicinity of troops engaged in combat. The BIRD DOG has a speed of 86 knots and the range is 400 nautical miles. Powered by a six-cylinder horizontally opposed piston-type engine, has a wing span of 36 feet, is 25 feet long and 9.2 feet high. Carries a pilot and one observer passenger.

L-20 "BEAVER"

A utility type airplane employed at division and higher headquarters to expedite and improve ground combat in the combat zone. This is the Army's standard fixed-wing utility class aircraft. This rugged airplane has extremely large wing surfaces, incorporates flaps, fixed landing gear and steerable tail wheel to permit maximum efficient operation from short unimproved landing fields. Carries a pilot and five passengers; pilot, two litter patients, and a medical attendant, or pilot and approximately 1000 pounds of cargo. Its speed is 97 knots and the range is 500 nautical miles. Powered by a nine cylinder radial piston type engine, has a wing span of 48 feet, is 30.3 feet long and 10.4 feet high.

U-1A "OTTER"

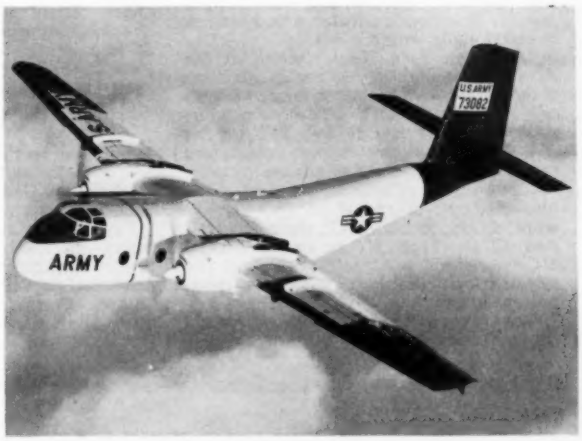
Assigned to Army Corps of Engineer units to assist in the conduct of topographic operations, the U-1A is also assigned to fixed-wing tactical transportation companies in quantities of 16 per company to expedite and improve ground combat in a combat zone. A rugged airplane, it has extremely large wing surfaces, incorporates flaps, droop ailerons, fixed landing gear and steerable tail wheel to permit maximum efficient operation from short unimproved fields. Carries a pilot and ten fully equipped troops, or pilot and approximately 2000 pounds of cargo, or pilot and six litter patients. Powered by a nine cylinder radial piston type engine, has a wing span of 58 feet, is 41 feet and 10 inches long and 12 feet 7 inches high.

AC-1 "CARIBOU"

A new transport airplane being procured to replace the "Otter". This is a twin-engine, multi-passenger aircraft capable of carrying three tons of equipment during air mobile operations and suitable for use as a supply carrier within the field Army air line of communications area during day, night or under instrument conditions. This aircraft, now being tested, will be assigned to company sized units normally operating at Corps and Field Army level and may be operated from unprepared fields or hastily prepared strips in combat thus complementing the HC-1 in its mission as a member of the VTOL/STOL transport team.

L-23 "SEMINOLE"

A utility transport type twin-engine airplane employed at corps or higher headquarters level for the accomplishment of command, liaison and courier missions pertinent to combat zone and training. This is the Army's standard fixed-wing utility transport class aircraft. This reliable twin-engine aircraft equipped with flaps and retractable tricycle landing gear is a remarkable performer from relatively short, improved landing fields. Carries a pilot and five passengers, is capable of long range all-weather flying and can be flown safely on one engine in case of emergency. Its speed is 139 knots and its range is 800 miles.



AUTHOR BIOGRAPHIES

Authors who submit material for publication are asked to send along a brief biographical sketch at the same time. This will preclude our having to write back and ask for the material, and will insure that we can print a little something about you. Or if you prefer not to have a biographical sketch printed, please say so on your manuscript. We know some folks are touchy about such matters.

RETURN OF MANUSCRIPTS

In consonance with a practice common among other magazines, *Infantry* will effect the following policy as of 31 May 1961. Any manuscript mailed to us without an accompanying return envelope, properly stamped, cannot be returned to the sender. The use of franked envelopes for our operation is not authorized, thus forcing us to pay postage on all rejections.

LETTERS

(continued from page 9)

Pro-Pay Tests

• After taking the Proficiency Test for 113.8 which was administered to personnel in U S Army, Hawaii . . . I reread the article by Capt Robert A. Sullivan, "Pro-Pay—Everybody's Business," which appeared in the April-May 1960 issue of *Infantry*.

Captain Sullivan sets forth a sound argument for, and explanation of, the Pro-Test as an essential phase of the Enlisted Evaluation System. However, on the basis of personal experience I have concluded that there is one weakness in the system . . .

. . . I believe that no enlisted man should be subjected to Pro-Testing until after he has held the MOS for which tested a minimum of 6 months. Further I believe that in addition to taking a Pro-Test in his PMOS an individual should be tested with the appropriate MOS test for the MOS . . . he is actually performing, ie: a MSGT with an MOS of 113.7 but performing duty as a Chief Clerk in an ROTC Instructor Group would be tested in 717.7 as well as in 113.7. This would be of value in determining whether the individual should retain his 113.7 or be reclassified into 717.7. . . .

MSGT J. C. Woodard, Jr.
USA AD GRU (NGUS) Hawaii
Hilo, Hawaii

We queried the author concerning MSGT Woodward's letter and received the following reply:

"Early in 1960, Department of the Army implemented a reclassification program with the basic intent of aligning skill digits with pay grades. The program was initiated to facilitate the E-8 and E-9 upgrading program and require Commanders to utilize personnel on the job in which they have been classified. As a result of this Army-wide action, many NCOs were reclassified to shortage MOSs or to 4-digit MOSs without complete regard to the implications involved with the pro-pay program.

Your suggestion to allow personnel to be tested in other than their primary MOS would be very difficult to implement because of the number of personnel Army-wide being utilized out of their primary MOS. The MOS system is designed to function properly only if commanders utilize personnel on a job with the MOS called for by the TD or TOE. If personnel are not available to fill a TD slot, action should be taken to reclassify a soldier into the MOS he is performing in or obtain a qualified replacement.

Your recommendation for giving consideration to the length of time a person holds his primary MOS prior to testing is well taken. With the application of the Enlisted Evaluation System to MOS classification and MOS qualifications your recommendation is even more important. The suggestion will be forwarded to higher headquarters for consideration."—R.A.S.

Help Wanted

• While I was instructing on the . . . Code of Conduct, a question was asked for which I could not find an answer.

Do other countries have something similar to our Code of Conduct? If so, what are they? We would appreciate any information . . . that you could supply.

1st Lt Donald M. Wilson
Hq & Hq Company
34th Inf Div, IAARNG
Des Moines, Iowa

We have been unable to uncover any information here at the Infantry School regarding similar codes in other countries. Right now we're checking sources in the Department of the Army in Washington. In the meantime, if any readers can help us, send your information to Infantry *Magazine.*—Ed.

Reflections on "Reflections"

• . . . I thought that the article "Reflections of Command" by Col Jack J. Wagstaff was superb.

The article sums up the views that many officers have on the new battle group organization, but [they] have hesitated to voice them. As a National Guard Company Commander with more than eleven years commissioned service, I can readily agree the Battle Group is only a "beefed-up" battalion with less mobility than the old battalion.

The comment on training commanders between company and battle group level is so true that it is amazing that this fact has not come to light before. . . .

Capt William A. Connelly, FARNG
62 Galbraith Road
Morristown, Pa.

From Battery B

• It is extremely important that all branches of the combat arms keep abreast of the thinking and development in sister arms. As an Artilleryman the best and most effective method that I have found to help me in this regard and in building and maintaining a high degree of understanding between the Artillery and the Infantry Units which I support is reading *Infantry* Magazine. I strongly recommend it to all my fellow officers. For many years I have found its many articles highly informative, enlightening, and helpful. I consider it a must on the reading list of all combat arms officers.

Capt Ben L. Walton
Btry B, 1st How Bn (105mm/155mm)
7th Artillery
Fort Riley, Kansas

Chattahoochee Choo Choo

• It would be most appreciative if Infantry readers who had the pleasure of riding the hard benches and absorbing the smoke and cinders of the Fort Benning Light Railway in the years 1919-1946 would contribute to me their anecdotes, photographs, or technical data pertaining to this operation, and general reminiscences of life at Fort Benning during their time here. I am particularly in need of additional material on the World War II years.

Contributors will receive a lifetime pass entitling them to free transportation if and when the line is again operational, and, if so requested, submissions will be carefully returned.

Major Rolfe L. Hillman
404-B Lumpkin Road
Fort Benning, Georgia

Attention Infantry Squad Leaders

Infantry is sponsoring a contest among present and past Infantry squad leaders (grade E6 or below), armored, airborne, or foot. We want enlisted authors for all subjects, but for the contest we limit you to one title: *Rifle Squad Leader—The Toughest Job In The Army.* Entries must be held under 2000 words, and must be postmarked not later than 30 June 1961. The prizes are above our usual rates: $60 for first place, and $35 for second place. Both winners will be published. Judges will be the *Infantry* staff.

Contestants should include a short biographical sketch and a photograph (optional) of themselves. Those who want their manuscripts returned must include a self-addressed, stamped envelope. And remember, we want E6s and below *only.*

Now, our purpose is to secure more enlisted authors, and for contest purposes we must hold to a single title. Anybody else who has an idea may also submit manuscripts of any length and on any subject of interest to the Infantry. If we accept yours, you will be paid at our usual rates. Meantime, we ask all subscribers and readers to help publicize this contest.

OVUREP

An explanation of the Army's Unit Replacement System by Col James H. Hayes, Inf

Captain, Captain, hear my plea,
OVUREP is killing me.
It's the OVUREP Boogie,
It's a crazy song.

THE MOURNFUL lament above probably led to the story that when a young Captain was given his choice of assignment to OVUREP or an isolated outpost on the Greenland icecap, he chose the icecap. Obviously, this, like many other rumors, is unfounded and unrelated to any fact.

What, then, are the OVUREP facts and what does OVUREP have as its objectives?

Let's get the prosaic data out of the way first before considering the more interesting aspects that a prospective company commander, platoon leader, or cadreman wants to know.

The standard facts are these:

a. The meaning of OVUREP is "Oversea Unit Replacement System."

b. The basic AR is 220-25, 22 January 1960.

c. The objective of OVUREP is "to provide an in-being system which will provide support of the Army doctrine of wartime unit replacement. . . ."

d. There are no volunteers because "The Army does not plan to solicit volunteers for OVUREP units."

Now, let's consider the major points of interest for the officer or enlisted man who is about to be assigned to an OVUREP battle group. In short, let us consider such things as stabilization of personnel, length of tour, status of dependents, and the actual functioning and training of the battle group itself. Most of these questions can best be answered by reference to the chart which depicts the typical OVUREP cycle (Figure 1).

It is clear that the entire cycle is of 112 weeks duration. Note the battle group begins at zero strength. Then there is an eight-week period during which the cadre are received and trained so that when the non-prior-service (NPS) personnel are assigned to the unit there is a going administrative and training structure for their receipt and subsequent training. The "A" cadre of 30 officers, 3 warrant officers, and 169 enlisted men are the personnel who establish the battle group as an administratively complete unit. The "B" cadre are the trainers and add an additional 25 officers and 151 enlisted personnel. Finally, the remaining 9 officers are received about the 20th week. There is no guarantee that these cadre personnel will remain with the unit throughout the entire cycle. However, the actual fact has been that few personnel leave the OVUREP unit. The regulation states "...reassignments in or out

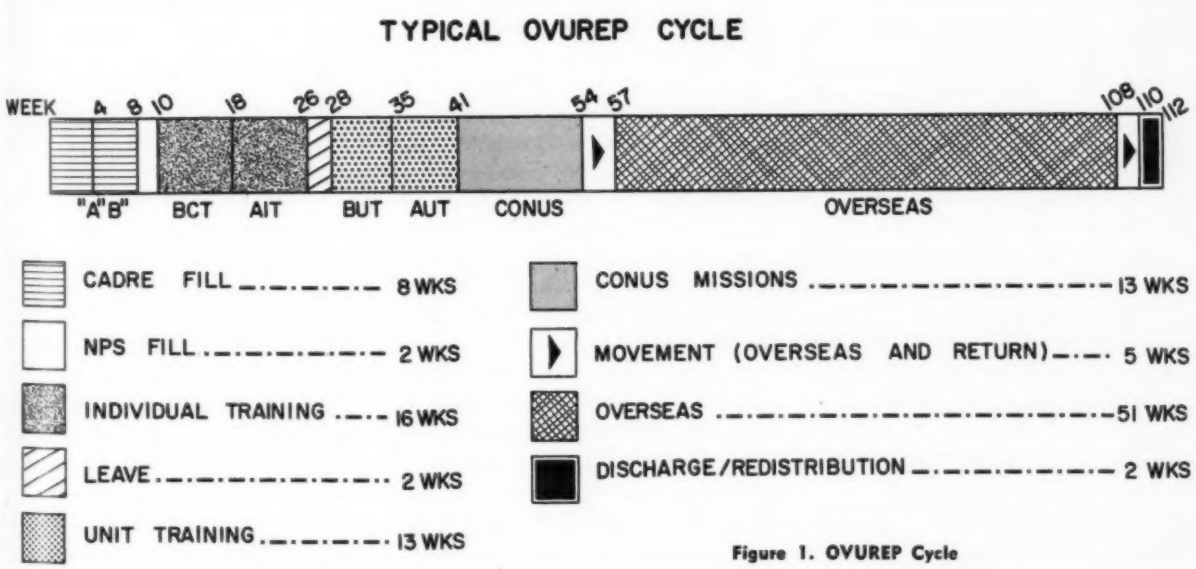


Figure 1. OVUREP Cycle

of the unit must be minimized. Personal or local convenience is not considered valid justification for reassignment . . . OVUREP units will be exempted from levies."

It is important to realize that the NPS personnel will have been in the service about two weeks when the OVUREP unit receives them. The experience in the 1st Infantry has been that these NPS personnel are roughly 60% RA and 40% selective service. Regardless of the percentages of RA and selectees, they must obviously begin with basic training. As the chart indicates, there are periods of individual training followed by basic unit and advanced unit training.

These are rewarding periods for the company officers and the cadre, many of whom have never been in a complete TOE outfit. The training is conducted by the company, for the company. The committee system prevalent at so many replacement training centers disappears. In its place, there is the squad leader training his squad for his platoon leader who is training his platoon for his company commander. The result is an *esprit* of a high order. Morale is high and there is a universal "we're really accomplishing something worthwhile" feeling.

This period is not easy. The work day is long; there is a lot of night work; the standards demanded are exacting and all personnel must give maximum effort. There are weeks when personnel literally work around the clock to fulfill the schedules prescribed by the ATPs. Naturally, there is a potential morale problem inherent in the long hours, and there is a definite danger that cadremen will be burned-out. This problem can be met by scheduling the work demanded of each individual. It is a delicate problem to handle from a command viewpoint, but not insurmountable. Moreover, it will certainly be a problem to be faced in event of mobilization.

The climax of the training at each phase (and the ulcer-producing item) is the testing. Thus, there is individual testing at the end of basic and advanced individual training. Then each unit from squad through battle group receives the appropriate ATT. The regulation states: "Satisfactory completion of Army Training Tests, to include the highest appropriate level, is a mandatory requirement for OVUREP units. . . ."

The CONUS period is different for each battle group and depends entirely on the missions assigned by higher headquarters. The important point is that the unit is combat ready and thus capable of functioning as a battle group. The 1st Infantry, for instance, will support a reserve Corps maneuver and was considered for the Lava Plains maneuver. Other missions could develop based on whatever the situation might be at the time.

The CONUS period is followed by an overseas period which at present is with the 7th Division in Korea for all OVUREP battle groups. It is at this point that OVUREP departs in a marked manner (other than size of units) from GYROSCOPE: *dependents do not accompany the OVUREP battle group.* The overseas tour is a hardship tour of exactly one year's duration.

THIS GIVES the rosy side of OVUREP—what are the problems? These are numerous and basically divide into two broad categories: (1) Those encountered by the battle group itself, and (2) those created from the supporting post by the presence of the OVUREP unit. Let's consider these briefly.

The first major problems occur during the cadre period and involve the usual basic personnel and administrative problems, except that they are bigger in nature. Thus, because the unit begins from zero strength and has only cadremen for the first 8 weeks, there is a decided lack of E1 types for KP, waxing and similar details. Thus E5s and E6s must wield brooms, drive the waxers, and even in some cases pull KP. This problem is further complicated by having the equipment of a TOE battle group on hand with only some portion of 300 men to maintain it. The maintenance problem is not incapable of solution, but it requires careful scheduling and a considerable degree of patience on the part of higher headquarters.

There are other problems involving preparation of orderly rooms, supply rooms, day rooms, barracks, and reception plans for the incoming recruits. The condition faced in each unit will undoubtedly be different. However, these plans are of the utmost importance because they give the incoming recruits the first impression of the type of unit that is to be their home for two years. In short, pleasant surroundings and well conceived reception plans create conditions which make the development of high *esprit* and morale easier.

In the 1st Infantry, for instance, these plans received careful and detailed consideration. The basic elements of the reception involved these important points:

a. Each group of incoming recruits was quickly divided into company groups.

2. The company groups were briefly welcomed by the company commander and successively assigned to platoons and squads.

c. The recruits were led by the squad leader to the squad bay where assignment was made to an already-made bed.

d. On the bed was his entire TA 21 equipment which he checked and signed for immediately.

e. The recruit was given an opportunity to shower, change clothes, and was then fed a hot meal.

The entire processing took less than an hour and the recruit was ready to start his training, which

began immediately. The morale effect of this reception more than repaid the work which went into it. Most importantly, it established a standard of efficiency and conduct for the future.

There are similar important problems to be faced in the initial preparations for training. Many of the cadre have been away from units for long periods of time and are thus physically below standard and have lost much of the sharp edge of their knowledge concerning basic techniques.

Here again, careful planning establishes a standard which the prospective recruits see and accept as normal because they know nothing different. In the case of physical fitness, there is a strong requirement for a battle group program to condition the cadre to the hard times ahead. A good solution is to establish a morning period of the "army dozen" *from which no-one is exempt.* By the time the recruits have arrived, every cadreman will either be in shape or will have shown that he is physically incapable of performing his duties. Similarly, if each cadreman is required to take the BCT and AIT individual test, there will be many weak areas revealed towards which the cadre training program can be directed. Finally, as a minimum requirement, the first 2 to 4 weeks of the BCT program should be prepared and rehearsed so that once training is started it can go full speed and at an extremely high standard.

During the remaining phases of the training the standard problems of personnel and maintenance exist. These, however, are within the framework of a full strength unit and can be solved by normal techniques. There are long periods on the range, squad training problems must be written, platoon problems must be written, and finally battle group exercises must be planned and run. These conditions obviously increase the maintenance and personnel problems. However, if the basic standards were set and demanded, none of the problems that arise are really insurmountable insofar as the battle group itself is concerned.

There are, nevertheless, major problems for the installation which support OVUREP battle groups. These problems involve personnel, training areas, and equipment.

Paradoxically, though there is considerable personnel stability within the OVUREP units, there is considerable personnel turnover in the supporting post or division. The reason is simple enough: the constant creation of battle groups, each requiring 300 plus cadre, rips the supplying units to shreds. It is beyond the scope of this article to determine the significance of this point, but it must, at some point, be considered because it is one of the major disadvantages of the OVUREP program.

There is also a major problem for the installation in providing appropriate training areas. The considerable amount of live firing during the AIT and basic unit training phase imposes severe strains on any post. If there are several units on the post in various phases of OVUREP, the strain is even greater. Finally, if as at Fort Benning, many units and a school require the same training areas, there is a major headache in scheduling. It is hard to say what effect an entire division of OVUREP battle groups would have on a given installation.

Finally, the provision and maintenance of equipment presents more than usual problems. We must face the fact that much of our equipment is old. It is extremely difficult to maintain. Much of it is limited standard and therefore phasing out of our system. Vigorous action is necessary on the part of commanders to keep their weapons, vehicles and radios operating. Equally vigorous action is required by all higher echelons to provide the necessary support to assist the commander to the maximum in the performance of his duties.

WELL, there is the OVUREP program as seen through the experience of one battle group. The program is excellent in many ways. In other ways there are major disadvantages which must ultimately be weighed. One thing is certain—it is a challenge.

COL HAYES, commissioned from the United States Military Academy in 1942, served during World War II as battalion commander. He attended the Armed Forces Staff College in England and the Army War College, and served as chief, DPO, USAIS. He is now Commanding Officer, 2d Battle Group, 1st Infantry, (OVUREP).

THE OLD ONE-TWO

Capt John R. Galvin
& 1st Lt Harold C. Lyon

IN EVERY rifle company the weapons platoon is the one of the one-two punch. Three mortars and two recoilless rifles reach out like a steel fist to knock the enemy down to size and set him up for the kill as the riflemen move in.

Like a boxer, the company commander fights with both fists. In a prizefight, a boxer with a injured hand becomes a tragic figure in the ring because his defeat is only a matter of time; his useless hand has cancelled all hope of a coordinated attack, and has ruined his chances for a good defense. Unless the company commander employs his riflemen with a boxer's coordination, he fights under much the same disadvantage.

These days, we don't have many opportunities to employ a rifle company in extended live fire exercises, and the weapons platoon (that strong left arm) doesn't get a workout too often. Most company tests tend to show that good fast one-two coordination just isn't there. The company commanders and the weapons platoon leaders know their jobs and they work hard, but many times they are not the team that they should be.

An outline of weapons platoon leader duties (taking into account only attack and defense) is presented here.

To amplify a few of these "junior maxims," and to emphasize the coordinaton between the CO and his "good left arm," we assembled the composite results of a lot of eavesdropping around rifle company command posts in the field.

Act 1, Scene 1
(The company assembly area. Commanding officer is speaking to the weapons platoon leader.)

C.O. That call was from group. They want me up for the order. We'll leave here as soon as I can get word out to the platoons through the Exec. Looks like we'll be attacking through the companies up on line.

WPNS. OK, sir. I'll check out through the platoon sergeant. Be with you in two minutes.

C.O. The terrain will be rough. Have him send the mules to the CP; the Exec will bring up all the vehicles except the 106s.

WPNS. Right, sir. Do you have any other information I can give them now?

C.O. Tell them to be ready to move about an hour from now.

Act 1, Scene 2
(High ground overlooking zone of attack. Battle Group CO has just finished order to company commanders.)

WPNS. Something tells me this is going to be a hard day.

C.O. I think you're right. Now, before we start on this recon, let's go over a couple of points. First, I think the main weight of the company will be through that high ground over there on the right side.

WPNS. There's another piece of high ground about half way out.

C.O. That will probably end up as an intermediate objective. Better plan to support a platoon attack on it.

WPNS. The main avenue of approach for enemy armor will be from that open ground on the left, won't it?

C.O. Yes, and also don't forget that we may run into dug-in tanks on the main objective. One thing I want you to do: check out that stream bed on the far left to see if your vehicles can get across. I don't think I'll have time to get over there myself.

WPNS. OK, sir. And on that smoke, I'll get with the Mortar Battery FO on the fire support overlay. I don't think I'll have enough 81 smoke to keep you covered for long enough, but we'll come up with something before the order. Where do you want us to meet you?

C.O. I'll give the order right here by 0920. Make sure you're back in time to coordinate. See if you can be here about 0900. (Exit CO)

WPNS. Yes, sir. See you at 0900. Hmm. , . (checking map) *I've got to check out this stream bed, so I'd better use these woods to get down there. Then along the stream and up on this nose where I ought to be able to see the right sector. Then back to check out some good positions.* Aloud: Messenger, go back the way we came up and tell the platoon sergeant to send up the key men. (Exit WPNS.)

Act 1, Scene 3
(Same place, 0900. The C.O. is going over some details with the tank platoon leader. Enter weapons platoon leader.)

WPNS. Well, I made it after all. I never thought I'd get out of that stream bed. It seems that they have a mortar searching it up and down every now and then.

C.O. I heard them. I knew you'd be enjoying your trip. Can you get across in that area?

Weapons platoon leader's check list
ATTACK

1. **Receive warning order from CO.**
2. **Give warning order to platoon sergeant.**
3. **Accompany CO to receive Group order.**
4. **Consult with CO and attachments on:**
   a. **Tentative plan.**
   b. **Reconnaissance plans.**
   c. **Time and place of CO's order.**
5. **Make a map study.**
6. **Send messenger for key personnel.**
7. **Make a rapid reconnaissance:**
   a. **Initial positions for weapons.**
   b. **Registration plan.**
   c. **Displacement plan.**
8. **Check back with CO:**

WPNS. No, sir. Not without a long delay to improvise something to cross on. The banks are high and steep on both sides.

C.O. I was afraid it might be that way.

WPNS. But I found a good displacement route, and we're all set on that. I recommend general support with the 106s from near the woodline and the 81s on the back side of the hill. The 106s could move up to that high ground if you take it as an intermediate objective. The 81s don't have to displace unless you want them to—the distance is only about 1700 yards from the main objective to their positions.

C.O. I plan to use the knoll as our intermediate objective, so I'll want the 106s up after it is taken. We'll leave the 81s in place until we reorganize. What did you and the Mortar Battery FO come up with?

WPNS. He'll take the smoke mission. I'll start preparatory fire on the intermediate objective at whatever time you say, and shift to the main objective. Will we be able to register right away?

C.O. Registration is to be timed with a Division firing at 1015. I'll get into that with you later. What did you figure out for reorganization?

WPNS. I think the 106s should stay over on the left. Are you going to have a platoon out on that low finger?

C.O. Right. That'll be the place for the 106s. The 81s can go in on the rear side of the objective.

WPNS. There's a good place for them down in a gully at the base of the hill. (Enter rest of platoon leaders)

C.O. All right, stay spread out and we'll move up where we can get a good look at the zone of attack.
(Exit all)

Act 1, Scene 4

(Company moving toward objective amid sounds of battle, dust, smoke.)

C.O. I didn't think they'd have so many automatic weapons on the main objective, but that smoke sure kept them off our backs. We've got to keep it up to cover the main attack.

WPNS. Yes, sir. The Mortar Battery FO says he can handle it. He's doing a good job. We're set to start working with him now. Do you want to open up?

C.O. Yes. Work the woodline up and dovn. They're heaviest on the right side now. Work to the right side from the center, about where you registered. How do we stand on ammo?

WPNS. It would be better to get going as soon as you can. I've got about 140 rounds up at the 81s now. The 106s are in position and can lay in on that woodline, and I will ease them around to the right where they can fire up that approach.

Act 1, Scene 5

(On the main objective; litter and smoke.)

C.O. I thought I'd seen the last of you when they pulled the chain with those rockets on us. Where have you been?

WPNS. I got down on the nose with the 106 section leader on recon just as it started. We rode it out in a ditch down there. The 106s are both set in now, with their principal direction of fire down that high speed approach on the left.

C.O. What about the 81s?

WPNS. I just checked them. They're back behind us, registered, and ready to fire. The mortars are laid on their barrages, and we're ready for a counterattack if it comes. Ammo is up for the 106s and it will be up very soon for the 81s. The 81s have about 30 or 40 rounds on position right now. My wire is in to all of the FOs.

C.O. That's good. I think I'll put the company OP out on that rise to the front.

WPNS. I want to see how my 3.5s are set in. I told the platoon sergeant to get some close-in protection for the 81s. I'll join you at your OP in a few minutes.

Act 2, Scene 1

(The company assembly area.)

C.O. We're going to go on the defense somewhere up to the north; I just got a call from Group and they've got an order ready. Get the word out to your people and I'll check with the Exec.

WPNS. I'll be with you as soon as I get my gear and get with my platoon sergeant.

C.O. Tell him they should be ready to move in about an hour. The Exec will take over back here.

WPNS. Do you want our vehicles up to the CP area?

C.O. No. Leave them where they are for now, until we can see what is going on up front.

Act 2, Scene 2

(High ground in the defensive sector. Group CO has just finished order.)

C.O. It looks like we got the best part of the zone this time. (Shows WPNS the Group fire support overlay.)

WPNS. It sure looks good. How do you plan to set us in, sir?

C.O. Right now it looks like we'll go in with two platoons on a line along the ridge, with the reserve platoon on that high nose behind us. I want to check some of that rough area on the left side. I told Delta Company CO that you'd meet him at the right limiting point at 0715 for initial coordination.

a. Results of specific reconnaissance instructions.
b. Best method of displacement.
c. Type support recommended.
d. Anticipated targets.

e. Time and method of registration.

f. Reorganization plan.

9. Receive CO's order.
10. Orient key personnel.
11. Give weapons platoon order.
12. Begin registration as directed.

13. Control support of attack from CO's location.
a. Maintain contact with all elements.
b. Designate targets to FOs.
c. Keep CO informed of ammunition and actions of platoon.

d. Shift fires as situation requires.

14. Control weapons platoon reorganization.
a. Make rapid reconnaissance.
b. Emplace 106s on main avenues of approach.
c. Direct displacement of 81s.

d. Make preparations to continue attack.
e. Readjust as necessary.
f. Supervise improvement of all positions.

DEFENSE

1. Receive warning order from CO.
2. Give warning order to platoon sergeant.
3. Accompany CO to receive Group order.

4. Consult with CO and attachments on:
a. Tentative plan.

WPNS. I'll be there at 0715. Do you want anything else checked in that area?
C.O. There's ground over there that can be covered only by mortars.
WPNS. Yes, sir. I'll run a good check of that low ground.
C.O. That's all then. See you right here at 0800 for coordination. I'll give the order about 0815, behind this high spot.
(Exit CO)
WPNS. *Well, if I have to be on the right limiting point at 0715, I'd better get on the stick. Can't check barrages, anyway, until I talk to the other platoon leaders. According to this overlay, most of my 81 fire will fit better on the right flank, so I can check the area out and also look for some 106 positions.* (To messenger): Drop back along the route we came up and tell the platoon sergeant to send up the key men.
(Exit WPNS.)

Act 2, Scene 3

C.O. You beat me back this time. Shows that I never give you enough to do. Did you spot those recon platoon people out on that low ridge to the front?
WPNS. Yes, sir. They gave me a scare at first, until I saw who they were. I met the CO from Delta Company and he showed me his general set-up. His left flank platoon will be up on that high ground at the bend in the road, and he has both 106s set to go in position there.
C.O. That means we may be able to shift our 106s farther to the left.
WPNS. Yes, sir. I saw that on the map and had it checked here. It isn't covered by Group, either. I'll work that out with the platoon which goes into position on that end. You'll want me in general support, won't you?
C.O. Yes. The other platoon leaders are coming up now; let's move behind this high ground.

Act 2, Scene 4

(Same area. Smoke, dust, harrassment.)
C.O. It's a good thing you registered early. Those barrages were the thing that stopped them on the left flank. The coordination with Delta Company worked out very well.
WPNS. The ammo vehicles came under fire when they crossed that open ground. I've got a new route being checked out.
C.O. Good. Did you lose your wire when that stuff came in?
WPNS. Yes, but I was in contact by radio. The wire is back in again now. I've got wire to the FDC from all the FOs.
C.O. The 106s did a good job on those two tanks that tried to break through. I've asked for some tanks from Group.
WPNS. I hope we can get them. The 106s have about six rounds each. I've sent back for more with an 81 mule. The 81s' supply vehicle was knocked out. The 81s are still OK with a total of 77 rounds.
C.O. Good. Make sure your men get some rest. It may be a long day.

A Checklist For The Weapons Platoon Leader

ATTACK

1. Receive warning order from CO.
2. Give warning order to platoon sergeant.
3. Accompany CO to receive Group order.
4. Consult with CO and attachments on:
   a. Tentative plan.
   b. Reconnaissance plans.
   c. Time and place of CO's order.
5. Make a map study.
6. Send messenger for key personnel.
7. Make a rapid reconnaissance:
   a. Initial positions for weapons.
   b. Registration plan.
   c. Displacement plan.
8. Check back with CO:
   a. Results of specific reconnaissance instructions.
   b. Best method of displacement.
   c. Type support recommended.
   d. Anticipated targets.
   e. Time and method of registration.
   f. Reorganization plan.
9. Receive CO's order.
10. Orient key personnel.
11. Give weapons platoon order.
12. Begin registration as directed.
13. Control support of attack from CO's location.
   a. Maintain contact with all elements.
   b. Designate targets to FOs.
   c. Keep CO informed of ammunition status and actions of platoon.
   d. Shift fires as situation requires.
14. Control weapons platoon reorganization.
   a. Make rapid reconnaissance.
   b. Emplace 106s on main avenues of approach.
   c. Direct displacement of 81s.
   d. Make preparations to continue attack.
   e. Readjust as necessary.
   f. Supervise improvement of all positions.

DEFENSE

1. Receive warning order from CO.
2. Give warning order to platoon sergeant.
3. Accompany CO to receive Group order.
4. Consult with CO and attachments on:
   a. Tentative plan.
   b. Reconnaissance plan.
   c. Time and place for CO's order.
5. Map study.
   a. Plan reconnaissance.
   b. Check fire support overlay.
6. Send messenger for key personnel.
7. Reconnaissance:
   a. CO's specific request.
   b. Defensive positions.
   c. Registration plan.
   d. Tentative barrages.
8. Recommendation to CO:
   a. Results of specific requests.
   b. Positions.
   c. General locations of barrages.
   d. Type of support.
9. Receive company order.
10. Coordinate with rifle platoon leaders.
11. Orient key personnel.
12. Give weapons platoon order.
13. Control support of defense from CO's location.
   a. Maintain contact with all elements.
   b. Call for fires as situation requires.
   c. Keep CO informed of ammunition status and actions of platoon.

The Orientation Course

First Schooling for Newly Commissioned Infantry Officers

Lt Robert J. McCloy, Inf

The newly-commissioned Infantry officer normally undergoes eight weeks of schooling at Fort Benning, Georgia, before he moves to his first permanent active duty assignment. This training, called the "Infantry Officer Orientation Course," provides the first military schooling for the young officer, preparing him for the role that he will normally assume upon graduation from the Orientation Course, that of a small unit commander.

An insight into the course necessitates a look at the Program of Instruction. The various instructional departments at the Infantry School divide the 304 hours allotted to the academics of the course. The largest bloc of time is given to instruction by the Ranger Department which, in addition to the Ranger Course itself, teaches subjects such as Patrolling, Platoon Tactics, Battle Indoctrination, Survival, Escape and Evasion, Bayonet, Hand-to-hand Combat, and Physical Training.

All of the weapons that a Platoon Leader would usually encounter in his duty are covered in instruction given by the Weapons Department. From the .45 caliber pistol through the mortars and antitank guns, the IOOC student is schooled in the functioning and uses of Infantry weapons, including the newest ones such as the M14 rifle and the M60 machinegun. Flame throwers, grenades, and mines are also included in the instruction by the Weapons Department.

The Command and Staff Department offers instruction in company tactics, operations, supply, and brief orientations on capabilities of supporting branches of the Army. Map and aerial-photograph reading, leadership principles, nuclear topics, combat first aid, preparation of a field exercise, legal aspects of civil emergencies, unconventional warfare, and the Army Information Program are the subjects presented to the Orientation Course by the Special Subjects Department. The Communications Department, Ground Mobility Department, and the Airborne-Air Mobility Department complete the list of contributors to the course. Altogether, these seven departments contribute a total of 304 hours of instruction to the students. Non-academic subjects total an additional 48 hours, and include the necessary in-processing and out-processing.

Types of instruction include conference, demonstration, practical exercises and examinations, with two-thirds of the time allotted to the practical exercises.

Academics being an important facet of this course, a great deal of emphasis is placed upon the examinations. A total of 700 out of a possible 1000 points are needed to graduate from the course. Examinations are weighted from 30 to 175 points. Unannounced quizzes are

also integrated into the testing procedure of the course.

An extensive counselling program is incorporated into the administration of the Orientation Course. Students who show tendencies toward failing the course are given additional guidance and instruction if necessary. In general, the orientation student can look forward to classes much the same as ROTC instruction presented in college, with the first weeks of the course devoted to review and re-introduction of the student to such Infantry "basics" as communications, map reading, and the means of mobility. The middle segment of the course is devoted to a review and familiarization of the weapons of the Infantry. The latter stages of the course then present the student with the opportunity to put into practice what has been learned. It is during these days of the orientation class that the student engages in combat and reconnaissance patrols from the planning through the de-briefing stages, and becomes involved in offensive and defensive tactics at platoon and company level. This type of schooling dictates work in the field in the form of the "Practical Exercise." To implement this field work, each class spends four days on an administrative bivouac. During this period of outdoor living, the class undertakes a night combat patrol, the infiltration course, a bloc of instruction on survival, and a Code of Conduct training session coupled with an escape and evasion exercise. Following soon after bivouac, the class takes part in a twenty-four hour rifle platoon tactics problem.

Although most of the instruction is presented during the normal duty day, the student can expect to take part in approximately twelve night problems during the eight weeks of the course. These problems vary in length from two hours to the all-night variety. Compensatory time is usually provided for late-night problems.

The mission to command, administer and support the Infantry Officer Orientation Course belongs to the Second Student Battalion of The Student Brigade at Fort Benning, Georgia. It is carried out by five detachments which billet the nineteen orientation classes each year. To aid this unit in accomplishing its mission, student officers should report in uniform as early as possible, and should have as many copies of their orders as are in their possession.

Orientation classes have from 150 to 205 officers each, including commissioned officers in the grade of second or first lieutenant with less than two years of commissioned service. These officers come from all sources except the Officer Candidate School. Most Regular Army officers, including West Point graduates, attend one of the two all-RA classes beginning in the late sum-

mer. There are, however, several Regular Army officers in each of the 19 classes. Instruction is the same for both the Regular Army classes and the Reserve Component Classes.

Bachelor officers in IOOC are billeted in the detachment area, while married students who have their wives with them must find accommodations off-post. All members of the Orientation classes are considered to be on temporary duty, except for the six-month ACDUTRA officers. Only those student officers who receive a PCS to Fort Benning are authorized to ship their household goods. In all other cases, there is a 600-pound limit on personal possessions.

The social side of an officer's development is not neglected. A reception is held by the class with the Assistant Commandant of the Infantry School, and the commanders of the Student Brigade and its Battalions, as guests. A receiving line and the necessary niceties of protocol are firmly implanted in the minds of the student officers at this affair, where, incidentally, it is expected that the dress uniform appropriate to the season will be worn. For the married members of the class whose wives have chosen to join them at Fort Benning, there is also a very active social calendar. Wives receive a thorough orientation on the "ways, whys and wherefores" of the military mode of living. Receptions, teas, and bridge get-togethers, not to mention luncheons, fashion shows and suppers, all keep the wives active and interested while at Fort Benning. (Meanwhile, the husband is beating his way through the bush, trying to evade an on-rushing scout dog.)

Because the Orientation Course provides one of the mainstreams of personnel into the Airborne and Ranger Courses, physical fitness is another very important consideration for the student officer. The student is tested until he can successfully pass the Standard Physical Training Test (not to exceed two retests). His physical condition during the Orientation Course determines whether he will be considered for further training at Airborne or Ranger facilities.

Thus, physically, academically and socially, the IOOC prepares the junior Infantry officer for his duty with the Army. All that remains to be gained is that one indispensable quality which no course can give—experience.

Lt McCloy, a graduate of the Ranger and Airborne Courses, received his commission in 1959 from the Drexel Institute of Technology, Philadelphia. Since completing IOBC he has been Cadre Executive Officer, 24th Detachment, 2d Student Battalion, TSB, USAIS.

TRAINFIRE 1777

Reverend Thomas Allen of Massachusetts was one of the many remarkable Patriots who fought for Stark at the Battle of Bennington on August 16, 1777. He fought as a private and years later, in conversation, he was asked if he had killed anyone on that day.

"I don't exactly know that I killed anyone," was the reply, "nor indeed how near I came to it. It was just this way; off some distance, I observed a clump of bushes, from which arose, every now and then, a little cloud of smoke, preceded by a momentary flash, and the sharp report of a gun. I noticed too, that one of our men fell, either wounded or dead, every time this phenomenon occurred, so I naturally concluded that something was wrong for our side. I loaded up very carefully and fired into the midst of that clump of bushes. I am not certain, mind you, that I did really kill anyone; but I know I put out that flash!"[1] (Contributed by Lt. Col. W. T. Hooper)

[1]Coburn, Frank W., The Centennial History of the Battle of Bennington, Boston, 1877, pages 69-70

The Captain Can't Communicate

Capt Brutus A. Lowery

IF BATTLE TESTED, the system of radio communications in today's rifle company would collapse because there are simply not enough operators for the equipment. TOE 7-17D authorizes each rifle company 16 radio sets AN/PRC-10, two AN/VRQ-3s and 18 radios AN/PRC-6. The same TOE provides only seven radio-telephone operators, three of whom have additional duties as drivers. These numbers reflect serious shortages and limitations (Figure 1). Furthermore, these shortages occur at a time when radio has increased in importance as a primary means of communication in the rifle company.

The principal characteristics of radio—the speed of installation, flexibility, and versatility through integration with wire circuits—make this means of communication readily adaptable to the concepts of wide dispersion and frequent rapid moves which will characterize the future battlefield. The increasing importance of radio communication was recognized in the equipment table of rifle company TOE, which added a more powerful and versatile radio set for the company commander, and a command net for the rifle platoon. A recent addition provides an AN/VRQ-3 for use by the company executive officer, a radio long needed for coordination and displacement. Its addition now allows the executive officer to operate on both the company command and battle group administrative net. Thus equipped, the company executive officer can stay abreast of both the logistical and tactical situations. It also appreciably reduces the load on the command net, and insures that high-priority tactical messages are not delayed.

The addition of radios for company observation posts has increased the commander's surveillance capability. An AN/PRC-10 has also been added for use as a company net control station, thus relieving the company commander of the responsibility for the administration and control of the net. All of these equipment additions are well justified and have been needed since the adoption of present operational concepts. However, one glaring weakness in the new organization stands out. It is the lack of operators. Again we have added equipment without adding personnel to maintain or operate it. The problem affects both the rifle company headquarters and other components of the company.

Rifle Company Headquarters

Sufficient communications personnel are not available in the company headquarters to operate all the radios at any given moment, much less provide for continuous operation. The radios to be operated by the company headquarters personnel are those of the company commander and executive officer, the company net control station, the company observation post radio, two sets for dismounted use by the company commander and executive officer, and one utility set. For these seven radios there are two operators, both having additional duties as drivers. There are only three other communications personnel: two wiremen, and a communications chief who is responsible for the installation, operation and maintenance of the entire communication system.

My experience reveals that communication systems will, in practice, be manned, even at the expense of the firepower of the unit. The commander must have an instantaneously responsive system of communications if he is to maintain control of his widely dispersed formations and move with the rapidity and frequency our tactical concepts dictate. All of his radios must be manned if he is to accomplish his mission. All command posts are required to operate 24 hours a day. It is obviously impossible for two men, who also serve as drivers, to operate six radio sets at any one time, much less continuously. And I have not even mentioned the re-

quirements placed on these men for maintenance of their vehicles and radios. This is another area of concern for the commander. The equipment will not withstand the rigors of cross-country movement, weather, and long periods of operation without some attention.

One way company commanders often accomplish the operation of this communications equipment is by requiring messengers to be supplied from the platoons. The company first sergeant and communications chief usually organize these men into shifts for duty on the radios, switchboard and security posts. However, the fact that riflemen are used as messengers reduces the fighting force of the company, and reductions of our firepower with today's huge required frontages could be disastrous.

Rifle Platoon Headquarters

There are no radio-telephone operators or messengers provided for the platoon leader. The platoon has six radio sets AN/PRC-6 for the platoon command net. The platoon leader is required to operate an AN/PRC-6 and the AN/PRC-10 on the company command net. The weight of these radios, together with that of weapons, pack, binoculars, and other equipment, would prohibit this operation even if one man could operate two radios at one time. Furthermore, while the platoon leader uses one radio, he could easily miss a critical message on the other. Thus, here again the effectiveness of the rifle platoon is reduced.

Weapons Platoon Headquarters

The weapons platoon leader is provided one AN/PRC-10 radio for use on the company command net. The platoon leader has a radio operator who also serves as his driver. This situation is unsatisfactory for the purposes of displacement of the vehicle, maintenance of radio and vehicle, and continuous operation. Of course, the platoon leader usually remedies this by assigning a member of the platoon as radio operator or driver, but this reduces the platoon's combat effectiveness.

81 mm Mortar Section

Comparatively speaking, the 81-mm mortar section is well off. There are four radio operators for the five AN/PRC-10s of the section. These men operate the radios for the three forward observers and for the fire direction computers. The fifth radio is used for displacement. These radio operators are the only ones in the entire rifle company who do not have additional duties.

Antitank Section

The two antitank squads each have an AN/PRC-10 operated on the company command net. These radios are operated by the squad leader. Since the squad is mounted, and the radio can be operated in shifts with the other three men in the squad, there is no requirement for an operator here.

Perspective

It is unfortunate that the authors of the rifle company TOE were saddled with such strict manpower limitations when drafting this organization. Department of the Army required that the Infantry Division Battle Group be reorganized without an additional man in any job. Lieutenant General Paul L. Freeman, Jr., described the effects of this situation quite well in an address to the Infantry Instructors Conference in July 1959, when he said: "We are obtaining new equipment, such as surveillance devices and more sophisticated antitank weapons, all of which require more transportation and more communications. To try to accomplish changes such as the integration of this new equipment without an increase in manpower is well-nigh impossible."

As the cliche goes, we are too lean to be mean. Let us hope that something is done before it is too late and our unmanned radios peep unheard to an unmanned Army.

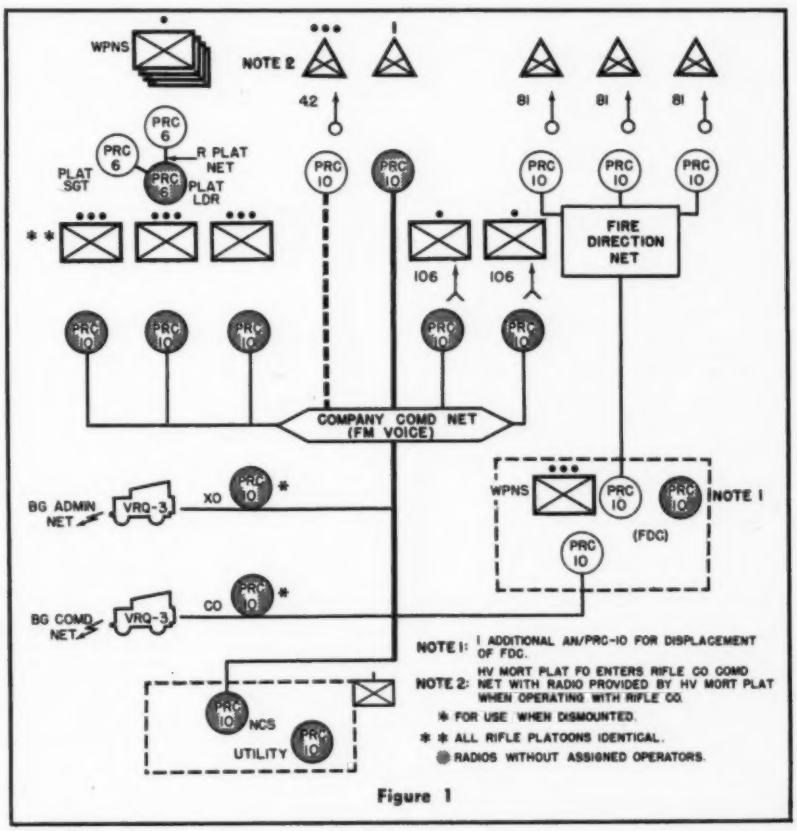


Figure 1

PERIODIC REPORT from the Commandant

This article is the first of a series featuring pertinent extracts from the Commandant's Periodic Letter to the Field, prepared by the departments and staff of USAIS, Fort Benning, Ga.

Command Control in Offensive Operations

During visits to field exercises, USAIS observers are frequently questioned on the problem of command control in mechanized offensive operations, particularly regarding the School's views on the best way to employ the deputy battle group commander (DCO).

In offensive operations the DCO is located where he can best assist the battle group commander (CO) in accomplishment of the mission. He is prepared to assume command of the battle group in an emergency, or to control any of its elements as directed by the CO.

When the battle group is attacking on two axes of advance, the CO's command group marches well forward on the main axis where it can best influence the action of the main attack. Included in this command group are the S2, S3, FSC and necessary signal personnel. The DCO will normally move on the secondary axis. A desirable separation of the commander and his second in command is achieved since the axes are separated sufficiently to insure that the effects of an enemy nuclear weapon employed against forces on one axis are minimized against forces on the other. In addition, by being with the secondary attack, the DCO is positioned where he can observe and report to the CO on its progress and where he can, if necessary, take control of this effort. Because reduction in the number of command echelons speeds responsiveness to orders, the commander normally retains control of the forces on both axes as long as he can effectively do so.

To assist the DCO in assuming command, should the situation so dictate, he may be accompanied by assistant battle group staff officers. The DCO thus has the minimum essential personnel to perform such missions as may be directed by the battle group commander. Should the CO's command group be destroyed or otherwise rendered ineffective, the DCO forms a command group utilizing the assistant staff officers together with personnel and facilities of the combat support company headquarters, which also marches on the secondary axis. Personnel of the combat support company headquarters are trained to help form the nucleus of an alternate command group.

The headquarters company, which may include the battle group executive officer, S1 and S4, marches on the main axis and is positioned toward the rear of the column where it can best coordinate battle group administrative support and where, in an emergency, it can control one of the axes or elements thereof.

Use of Selectors Issued With The M14

All the M14s now being issued can be equipped with selectors which permit them to be fired automatically or semi-automatically. Because the rifles arrive without their selectors installed, they can be fired only semi-automatically when first unpackaged. Questions have been raised concerning the number of M14s a unit ought to equip with selectors, and the disposition of remaining selectors not installed on the weapons.

USAIS feels that use of the selector will normally be limited to individuals armed with the M14 modified bipod and hinged butt plate), and to reliable marksmen who are capable of accurately and properly distributing their fire. Close control of selectors will be exercised by unit leaders to conserve ammunition. Furthermore, selectors not installed on rifles will be kept at company level, the lowest possible echelon at which an armorer is available to control and maintain them.

Infiltration

Commanders have long understood and used infiltration techniques to penetrate enemy positions. In the environment of the nuclear battlefield, however, infiltration may well assume even greater significance.

Adapting the definitions in AR 320-5 and FM 31-20 to current concepts, we can describe infiltration as the passing of small elements of units *through or over* enemy positions into enemy rear areas, where the units assemble to perform missions in support of the over-all plan. Thus, while patrols use infiltration as a technique to gain access to enemy areas to perform combat and reconnaissance missions, infiltration also envisions company-size or larger units using the same technique as a means of introducing a significant force into the enemy rear. Such infiltration may be accomplished by ground or air movement.

Missions that may be assigned to infiltrating units include the seizure or destruction of enemy personnel, materiel, instructions, lines of communication, and the seizure and control of key terrain.

Phasing of the operation in a ground movement begins with passage of small units (half squads or squads) through enemy forward positions, making full use of stealth and deception. These units then assemble in predesignated attack positions, assembly areas, or alternate assembly areas in the enemy rear. The final phase is the attack to accomplish the mission.

Army aircraft may be employed to speed the movement of infiltrating units by moving over enemy positions. The phasing of this operation is similar to the phasing on the ground operation. In this particular technique, aircraft fly individually or in small groups into the enemy rear area. Flight routes avoid enemy-occupied areas where possible, and, as a deception measure, simulate landings at various locations in the enemy's rear after dropping troops and during both the approach and return flights. The characteristics that distinguish airmobile infiltration from the conventional airmobile attack are the greater reliance upon secrecy and deception, rather than on fire support, during the movement phase, and the great time required to build up combat strength in the enemy rear before undertaking other operations.

Implicit in tactical infiltration, ground or airmobile, is the requirement for conditions of darkness or low visibility during the passage through or over enemy forward positions. These conditions, together with the dispersed nature of the operation, increase the requirement for detailed planning and the careful briefing of all participating personnel.

The success of infiltration is greatly dependent upon reliable communications and accurate, long-range fire support. Since units are initially dispersed in moving to assembly areas or attack positions, good communications are needed to coordinate and control the operation. Accurate fire support is essential for units which will frequently be unable to take along organic fire support means.

The detailed planning will result in a variety of control measures. Infiltration lanes for ground movement, phase lines, check points, assembly areas or attack positions, objectives, link-up points and fire coordination lines will facilitate coordination and control. Contingency plans will provide rendezvous areas for units that may become lost or diverted by enemy action, or from which units may be evacuated by air. Depending on the over-all plan, provisions will be made for link-up, evacuation, or ground exfiltration back to friendly positions.

Thus, while infiltration is not new, its application as a technique of penetration will undoubtedly receive renewed emphasis in the future. Certainly, the extent of the application of this technique will be limited only by the initiative and imagination of the tactical commander.

Flank Security for an Attacking Battle Group

When a battle group conducts an attack, the battle group reconnaissance platoon normally is assigned the mission of screening the most dangerous flank of the battle group. Since the reconnaissance platoon does not have the capability of screening both flanks, a reserve rifle company frequently has been normally assigned the mission of screening the other flank. This has been found to be unsatisfactory due to the slow reaction time between this security (usually a reinforced rifle platoon) through the reserve company to a battle group. To solve this problem, a reinforced rifle platoon from a reserve company is now placed under battle group control for use as flank security. This arrangement permits direct control by battle group, thus reducing reaction time. Instructions to this platoon are given in paragraph 3 of the operations order in a separate subparagraph following the subparagraph for the battle group engineer platoon. (Par. 4c(4)(b), page 4-6, O&T Handbook, FY 61 Edition)

When the battle group is mechanized, the rifle platoon performing flank security under battle group controls is also mechanized. In addition, short range radar and assault weapons will be attached as required. When the mechanized battle group is attacking on multiple axes, security between the axes is maintained by another reinforced rifle platoon under battle group control. Army aircraft may be used for this also.

In a dismounted attack, the rifle platoon which is

assigned a flank security mission is motorized, and usually has the same reinforcements as for a mechanized attack. The numbers and types of vehicles provided for this platoon and their sources are as follows: three ¼-ton trucks (one from the parent company, one from headquarters and headquarters company and one from combat support company); four ¾-ton trucks from the heavy mortar platoon. (Par. 5c, page 11-5, O&T Handbooks, FY 61 Edition)

In both instances (mechanized or motorized), the rifle platoon performing a flank security mission under battle group control must be provided with an FM radio with a 16 kilometer range capability (VRQ-3 or VRC-10).

Whenever possible, reconnaissance of both the route and the objective area is made by the patrol leader and pilot. If possible, a reconnaissance should be made in a high performance aircraft; in the event no physical reconnaissance is practicable, a map and aerial photographic reconnaissance is made.

Patrols may be airlanded and picked up during the hours of darkness or poor visibility. The mission, enemy, and terrain, as well as the pilot's knowledge of the area of operation, are influencing factors as to when the flight will be made. Patrols may be required to remain in place to continue to report information of enemy activity and rejoin friendly forces when they pass through the area. In the event the arrival of friendly forces is delayed, the patrols will be picked up by aircraft or will be required to infiltrate to friendly lines.

Patrols may be equipped with AN/PRC-10 radios. To ensure uninterrupted radio contact beyond the range capability of the PRC-10, aircraft should be equipped with an AN/ARC-44 to act as a relay station between the patrols and the battle group.

The employment of battle group air transported reconnaissance patrols in conjunction with other intelligence collection agencies organic to or in support of the battle group increases the information collection capability of the battle group.

4.2-inch Mortar Field Manual

Numerous inquiries have been received concerning the publication of FM 23-92, "4.2-Inch Mortar, M30." Upon completion of work here at USAIS, the draft manual will be forwarded to USCONARC for approval and publication. The date of availability cannot be determined at this time. Until the field manual is published, training guidance for the M30, 4.2 Inch Mortar may be obtained from either FM 23-92, dated April 1951, with Changes 2, 3, and 4, or from Special Text 23-92-1, dated May 1954, which is available through the Book Department, USAIS.

M60 Machinegun Tripod Mount, M122

USAIS has recently received 300 M122 Tripod Mounts for the M60 machinegun. We have found that there is an excessive amount of play between the elevation adapter on the traversing and elevating mechanism and its mounting plate on the bottom of the gun. The Post Armament Shop has discovered that by placing the adapter on a press and closing the width of the slot to 1.440 inches, it will perform satisfactorily.

An unsatisfactory equipment report has been submitted to Ordnance to correct this error.

Relationship of the Heavy Mortar Platoon, Infantry Division Battle Group, and the Artillery Battalion in Direct Support

The heavy mortar platoon (Inf Div BG) is usually employed in a general support role, being positioned where it can support the main attack or cover the most dangerous avenues of approach. The battle group commander prescribes the mission, general position areas, and method of employment pursuant to his concept and based on the recommendations of the platoon commander.

The fires of mortars and artillery are first coordinated at the rifle company level by the company commander. The coordination of heavy mortar fires between companies is accomplished at the heavy mortar platoon FDC. Artillery and heavy mortar fires are coordinated simultaneously at the battle group CP and at the artillery battalion FDC. Ultimately, heavy mortar fires are integrated into the artillery fire plan at the FDC of the artillery battalion in direct support. Thus, only one fire plan is prepared with the appropriate components such as graphical portion, target list, marginal information, tables of groups of fires, and schedules of fires.

The AN/VRC-10 radio of the howitzer battalion *normally* is employed in the battle group command net. As a result, the artillery FDC is not able to monitor the mortar FDC, nor are the mortar forward observers able to call directly the artillery FDC for fire missions. However, there are two AN/VRC-9 radios organic to the mortar platoon FDC. If artillery fires are needed, they can be requested by the platoon fire direction officer. Moreover, these radios, which are used primarily to monitor the artillery battalion fire direction nets, offer a means of communication between the artillery forward observers and the platoon FDC. Thus, there is a constant communication link between artillery forward observers, the mortar platoon (section) FDC, and the direct support artillery battalion FDC.

In addition, the artillery battalion in direct support will establish a switching central in the battle group area. Wire communications will be established as a direct line between the heavy mortar platoon FDC and artillery battalion FDC or by the alternate means of a line from the forward switching central to the heavy mortar platoon FDC.

The artillery battalion in direct support is responsible for establishing the survey control point for the heavy mortar platoon. This will be considered in the preparation of the division artillery survey plan. Further, the survey control point for the mortar platoon will be established within 100 meters of the heavy mortar platoon position area.

For efficient utilization of both units, it is imperative that the employment and fires of the heavy mortar platoon and the artillery battalion in direct support be closely coordinated and integrated.

Infantry USAR Schools Career Course

USAIS is now offering an Infantry USAR Schools Career Course. This five-year course replaces the former USAR Associate Company Officer Course and the USAR Associate Advanced Officer Course, each of which was three years in length.

Infantry Officer Refresher Extension Subcourses

The Department of Non-Resident Instruction is now administering three Infantry Officer Refresher Extension Subcourses which closely parallel the refresher course being presented at the United States Army Infantry School. These courses provide a brief but comprehensive coverage of selected Infantry subjects which serve to highlight current battle group organization, equipment, doctrine, tactics, and techniques.

A Field Expedient Test of the Electrical System of the 3.5-inch Rocket Launcher

When the M20A1B1 3.5-inch rocket launcher is inspected, frequently the inspecting officer or noncommissioned officer devotes all of his attention to checking the physical and mechanical aspects of the weapon and fails to check its electrical system. Consequently, many of the rocket launchers which are taken to the firing line are excellent in appearance and good in mechanical operation but actually cannot be fired because insufficient electrical current is generated to ignite the rocket when the trigger is pulled.

At the United States Army Infantry School, failures of this type are kept to a minimum by conducting a field expedient test. This test is made on each 3.5-inch rocket launcher before it is taken to the firing line.

A three-volt flashlight bulb is the only item of equipment required to make this test. Disassembly of the weapon is not required.

To test the electrical current of the rocket launcher, rotate the control handle to the fire position. Hold the flashlight bulb *inside* the rear of the rocket launcher tube so that the contact point of the bulb touches the firing contact of the rocket launcher and the side of the bulb is grounded to the inside wall of the tube. When the trigger of the rocket launcher is pulled, the flashlight bulb should show a brief flash of light. If no light is observed, the current generated by that rocket launcher is probably insufficient to ignite a rocket and the rocket launcher should be turned over to qualified Ordnance personnel for repair. If there is a flash of light from the bulb when the trigger is pulled, the electrical current generated usually is sufficient to ignite a rocket. This test appears to be valid regardless of the intensity of the flash of light.

Physical Combat Proficiency Test

Report of the Physical Combat Proficiency Test project has been forwarded to Department of Army and approved. The test battery consists of a 40-yard low crawl, horizontal ladder, dodge run and jump, grenade throw, and a one-mile run. USCONARC directed USAIS to revise appropriate literature to cover the test. Changes to training literature should be available in approximately four to six months if there is no delay in final approval of recommendations.

RANGER TRAINING

A Ranger "On Rappell."

Bayonet disarming (above) and hand-to-hand combat (below) teach important techniques, aggressiveness, and self confidence.

Everyone who has experienced combat knows the value of tough and realistic training. Because current tactics emphasize independent actions by small units, the demand has increased for soldiers who are trained under rough conditions and accustomed to producing exemplary results under rigorous combat environment. The Ranger Department of the Infantry School provides us with this type soldier—energetic and aggressive volunteers who possess exceptional endurance and are skilled in fieldcraft, survival techniques, and special environment operations.

Ranger training is rough. It is a combat conditioning course which closely approximates, and often exceeds, conditions of actual warfare. Problems are physically and mentally tiring, requiring maximum effort with minimum rest. Assigned missions are normally accomplished during periods of hunger, fatigue and strain. The necessity for quick, sound decisions and the requirement for demonstrating calm, forceful leadership under these conditions make the successful graduate a master craftsman of the soldier's trade.

Through training such as this, a small unit leader is developed who is mentally and physically capable of sustained action in any type warfare and who will always have command of the situation regardless of time, place or circumstance. In addition, these are the men, in the words of the Commandant of the Infantry School, ". . . upon whose skill and daring will depend the success or failure of land combat in the future. Decision, action, initiative, leadership; these are the requirements that will be [theirs] on the battlefield where independent action, night fighting, isolation, and extended frontages will be the rule rather than the exception.

The use of ropes and mountaineering techniques enable Rangers to negotiate difficult obstacles.

The poncho raft is a quick expedient which helps Rangers to cross streams with their full equipment.

During their training in Florida, Rangers use pneumatic boats for amphibious landings and river crossings.

Mental determination must accompany physical strength to complete Ranger Training successfully.

GUERRILLAS IN MALAYA

An on-the-spot report by Capt G. C. Phipps, British Army

EXPERIENCE has proven with almost depressing monotony how successful Communist inspired guerrilla type operations can be. With the minimum of economical effort, Peking and Moscow can, with little more than verbal encouragement and Marxist doctrine, obtain far reaching results where vast sums of Western aid have failed to provide stability for the countries concerned.

Malaya was a typical example of Communist infiltration tactics. The country consists largely of pure jungle. However, there are numerous large rubber plantations, tin mines, and rice fields. Only the larger towns are connected by good roads, these carved out of the jungle. The remaining roads, such as those found on the rubber estates, are of red clay soil.

To those who may be wondering what place vehicles and heavy conventional weapons have in countries with few roads and still fewer railways and airfields, I would strongly suggest, judging from personal experience, that they forget them, leave them behind, and instead think of a shot gun, and two pair of feet per man, and close communion with Nature at her most primitive.

Before leaving for Malaya, my battalion was thoroughly briefed on the situation there in regard to background history, local customs, how to operate in theory, and in particular on preventive medicine. While on this particular subject, I would like to attack what it seems to me are prevalent myths. One

hears loose talk about Dengue fever, malaria, scrub typhus, dysentery, cholera, leprosy and so on. I would like to make it clear that although these and countless snakes did exist, it is far more dangerous to go driving in one's own car, infinitely so. With simple precautions and inoculations, it is almost certainly nothing but carelessness and poor personal hygiene if one gets sick. There are always the very few genuine cases of bad luck but the odds are the same as in one's own country.

It was necessary, however, to expose one's body to the sun whenever possible, as patrolling in the damp humid swamps and dark of the jungle produced much the same result to the skin as lying in a tepid bath for a long time, making it wrinkled and white. As for malaria, there can be no excuse any longer; a pill will suppress this.

The other prevalent myths are about snakes and wild animals. In Malaya there are many varieties of poisonous snakes from the King Cobra to small vipers. I saw many snakes but never heard of anyone being bitten. In one company base, a large King Cobra weaved frantically between recumbent soldiery and finally threw himself across a stream to get away. No one was chasing him. Most people I have spoken to never saw a snake the whole time they were in Malaya.

In the same way, the wild animals keep well away from humans and are hardly ever seen. However, some are heard. The jungle

is not necessarily a quiet place, especially at night. The insects, frogs and howler monkeys together can make considerable noise. For the record, elephants, rhinocerous, wild cattle, tigers, leopards, monkeys, wild pigs, monitor lizards and a host of other smaller animals live there, but there is plenty of room for all.

Then there were the leeches and big bull leeches. These are unpleasant if a surprise and cause septic wounds if you don't know what to do. But the precautions are simple. I don't know how they can all make a living in the jungle, but the fact remains that they are prevalent. They drop off the bushes, trees, etc., onto you as you brush your way through. They attach themselves to you, the size of a thin bicycle tire valve rubber and gorge on your blood. You do not feel them and they have probably fallen inside your clothing. At the end of the day or sooner, as you have time, go carefully over yourself, locate the leech and stimulate him with a burning cigarette. He will then let go voluntarily. If, however, you try to pull him off, he will burst and leave his suckers embedded in you, and you will probably become infected.

Our personal first aid packs were in water proof bags and were carried at all times. They consisted of:

(1) Sulphur Mez—for wounds.
(2) Shell dressing—bandage.
(3) Dysentery and diarrhea pills.
(4) Morphine syrets.
(5) AP CO D pills—for headaches and toothaches.
(6) Antiseptic pen.
(7) Styptic pencil—for leech bites.

Sufficient instructions were printed on the packs to correctly use the items.

On arrival in Malaya, my battalion moved straight to the Jungle Training School where we were trained as a unit. We trained in the jungle with live guerrillas present (perhaps we both trained in this area). The stimulus to learning was enhanced thereby, especially as a chance encounter by a patrol resulted in a kill in our second week in the country. We learned how to live and cook for ourselves in the jungle, and I am sure went through much the same curriculum as at the US Army Jungle Warfare School in Panama. We used the small pocket cooker which is nothing more than a small collapsible stand with receptacle for a Hexamine tablet. Our rations were well devised and I fed better than in Germany on field maneuvers, where the food usually arrived eight to twelve hours late and stone cold. For a change, we could swap to Ghurka rations. We also learned that without a map and compass and completely lost, the best thing to do was to follow a stream which always led to the river, which in turn would lead to a road or Malay village — eventually!

We learned that the jungle consisted of two types—primary and secondary. The primary jungle was the true jungle with immensely tall trees, the canopies of which fought for sunlight and left the jungle floor damp and dark, but reasonably good going. Secondary jungle was where, for some reason, the primary jungle had been cleared with the result that many small trees had grown close together and were fighting out the battle for survival. This jungle was thick and very difficult to work in. The swamps need no explanation, except to say that they were the homes of myriads of mosquitoes. Rubber plantations were easy going with the trees grown in ordered rows and spaces, and the underbrush kept reasonably clear. The jungle was a mass of small hills and valleys with streams everywhere leading to rivers. The only tracks were those made by loggers or those in the rubber plantations.

The climate is extremely humid and hot, and every day there is a thunderstorm, more or less at the same time. In December, it rains almost incessantly day and night. There are no seasons as people in the temperate zone understand them.

At this late stage, I might as well come clean and admit that I make no claim to being a jungle expert, as I was assigned, following training, to the headquarters of an independent Infantry brigade in the center and east of Malaya as Assistant G3. However, I was in the middle of the chain of command so to speak, and from my desk I could view the war with possibly good perspective. So I don't intend to go into details of jungle warfare techniques but merely to mention a few points which to me are of interest.

Our commanding officers constantly strove for new ideas, and careful analysis of every operation, however small, took place at all levels. Responsibility went right down to the squad leader, and the individual soldier had to be self-sufficient in all respects. It was often called the platoon commanders' war. No matter how good the intelligence and planning, one inattentive sentry could let through a complete guerrilla band. One inattentive member of a patrol could endanger the lives of his comrades.

Ambushes were always laid with or without information and the length of time they were established could vary from a few hours to days and nights. One important lesson learned the hard way, was for a commander not to visit his ambush party without warning and without very careful precautions; more than one got shot mistakenly.

Another teething problem with the soldiers was the accidental discharge of their weapons. Troops were not used to carrying loaded weapons with "one up the spout" all the time. The most common

times were either during a patrol when a branch caught against the trigger, just plain fiddling with the weapon, or when unloading at the end of the day. Like car accidents, they should not happen, but they do.

Accurate aimed shooting was essential as the range was always very short and the target a fleeting one. At night, ambushes were often undertaken with automatic weapons and shot guns. I don't know if Infra Red was ever used, but it would have been definitely well worth trying. The Claymore would also have been invaluable. However, I fear that this may well be a two edged weapon, because if guerrillas use it, they will do so with great effect and cunning.

Each company base always had a jungle lane which was a jungle adaptation of TRAINFIRE; targets appeared quickly and disappeared, at all angles and heights. Almost every type of rifle and submachine gun were tried. Our SLRI (M14 equivalent) and Bren gun proved more than adequate. However, it was quite normal for night ambushes especially to take shot guns.

The only effective method in dealing with a terrorist camp was to locate it and surround it completely, and then send an assault party through, the cordon picking off those who ran away. This was a tricky operation which required skill and timing especially as the cordon had to be almost arms abreast from each other. The terrorists naturally had sentries and picked their camp site to ensure good routes of escape, and where it would be difficult to be surrounded without its being obvious.

The use of 4.2 mortars and artillery was entirely harrassing and very much beneath the weapons' capabilities, but it was impossible to drag them through the jungle and fire them. The RAF were also used to bomb bandit camps but again the odds were against them. One successful operation proved how accurate and carefully planned all details had to be. In fact, in this case, bombing was only used because the camp was in a swamp, the entrances to which made surprise by foot troops impossible. The troops followed by helicopter and let themselves down on ropes. The SAS (Special Air Service) developed a technique for parachuting into the jungle. The theory was that the parachute would get caught in the top branches and they would then let themselves down on ropes. The danger was that the parachute would not catch but collapse and the soldier free fall the remaining few hundred feet through the jungle canopy.

Extensive use was made of tracker dogs which were attached to rifle companies. One of my duties at brigade was to collect the patrol reports on tracker dogs and frankly the result was "zilch!" As guard dogs perhaps there is a use, but as trackers very doubtful.

However, we did have excellent trackers in the Sarawaks from Borneo. One can always get caught out, and the story goes that one appeared to be somewhat clueless and on investigation proved to be a bus driver at home. They were cheerful and enthusiastic and accompanied the patrols as required, and lived with the companies.

Resupply was entirely by use of aircraft, either by parachuting or free drop and by helicopter. Extensive use was made of helicopters; in fact, it is difficult to imagine life out there without them. They ferried troops into the jungle, carried out casualties and almost every conceivable use was made of them. The pilots learned to land them down into clearings barely larger than the circumference of the craft itself. While I was there, the Navy and RAF operated the helicopters and the Army the light Auster aircraft, which carried out the bulk of the reconnaissance and liaison duties. Clearings had to be made by patrols for both parachuted supplies and the helicopters. Usually natural clearings caused by fallen trees were selected and improved upon. Wireless, smoke and signal panels were used to guide the aircraft.

Wireless communications were not easy but neither were they by any means impossible. HF (AM) sets were used and I believe VHF (FM) sets will not work unless some form of relay rebroadcast system is used, such as an aircraft or a set on the mountain top. This is of course not always practicable.

The police had a series of relay stations set up at strategic points and used FM sets, but they were also static; however, they worked excellently at all times of the day and in any weather conditions.

There were strict regulations laid down regarding road movement. They were SOP, and the roads classified according to their relative security. As a rule, for a small convoy, at least one armed vehicle with machine gun accompanied the convoy. The troops travelled in open vehicles and observed at all angles. If they came under fire, they immediately smoked one side of the road and debussed onto the other, from which they made immediate assault. The armed vehicle, meanwhile covered them with fire. Despite all precautions, some unpleasant ambushes took place. Road verges were cut back to ensure no ambush party could get within close range. We used the six wheeled Sacracen armored scout car and APC, and also the smaller ferret scout car with machine gun turret. Tanks or tracked vehicles would have been ponderous and slow, and would have torn up the roads. The Communists themselves were also organized on a regional basis which by and large paralleled the districts of the civil administration. They also had their cells and branches, firstly in the villages and secondly in the jungle. They provided the intelligence, money, supplies and control over the peo-

ple. In the jungle there were also the elite Independent Task Plats. They carried out the equivalent duties of the military and organized the more ambitious "incidents" such as attacks on convoys, police armories and the larger ambushes.

The terrorist communication problem was solved by couriers who travelled the jungle and one of the aims of the police and the military was to discover the courier routes and to catch the couriers themselves if possible, as they would have valuable information on their persons.

It was essential for any captured documents to be passed back to Intelligence as soon as possible for obvious reasons. It was from these documents that the general health and state of the organization as a whole could be judged, as well as items of information which probably required immediate military or police action.

The size of the patrols varied from two or three men, to an entire company. It was my experience that the larger the patrol, the more careless it became. It was difficult to keep the chatter down and less effort was made to move quietly. A bad company could be tracked through the jungle from sweet wrappings and cigarette packages.

Apart from British units, there were other Commonwealth units participating. There were Malay battalions and while I was there, the Federation units were being trained. These consisted of troops from all three races, namely Chinese, Malay and Indian. These units were to form the future regular Army of Independent Malaya.

Then there were the Ghurka battalions; these troops were recruited from Nepal and from part of the British Army under a long standing association dating back to the early days of the Indian Army. They were probably the most expert and skillful of all the troops in jungle techniques. They fought throughout the emergency, taking time out on rotation in Hong Kong. The Ghurkas rank amongst the elite in our Army. Successful cadets from Sandhurst can get regular commissions in Ghurka units and spend their entire careers with them. Australian and New Zealand units took part and also various African units who naturally adapted quickly to operations in the jungle. Finally, there were the remarkable Fijis. The Fijians have splendid physiques and were the only troops who could run the terrorists down in the thickest jungle and club them to death with their rifle butts.

Our Special Air Service battalion specialized in prolonged deep jungle operations. In this connection, jungle forts were built with their own aircraft strips. The object was to enable patrols to operate in the deep jungle in the more inaccessible areas for longer periods. These posts were combined military police establishments. It was also evident that the Communists were applying pressure on the aborigines who lived in the deep jungle and about whom very little was known. They hunted with blow pipes and poisoned darts. The civil administration sent out agents (for want of a better word) who located the aborigines and with police assistance provided the necessary protection for them against the guerrillas' demands for food and supplies.

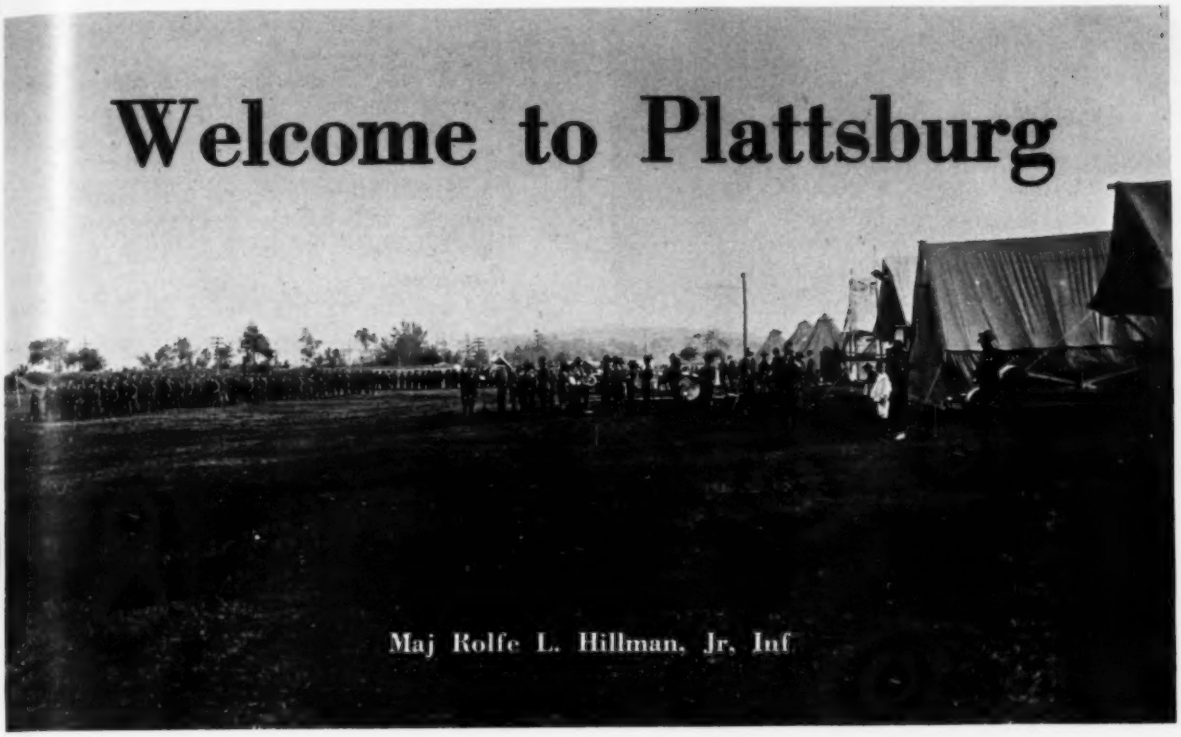
Another welcome member from the days of the Indian Army (before independence) was the Charwallah (Teaman). In the Indian Army, a Charwallah obtained the contract with a unit and provided all of its PX, laundry, etc., needs. The Charwallahs came over from India and Pakistan on their own initiative and set up in business. They have one or two advantages over the PX (or Naafi in our case). First, they can and do operate at any time in any place and under any conditions. The Charwallah would send one of his underlings into the jungle with a company patrol and would maintain him there until the company returned. His terms of business were such that he would undercut Naafi prices as well. Whenever a commanding officer received contradictory orders regarding the future location of his unit, he usually checked with the Charwallah to find out for certain!

Today the emergency in Malaya is over. The top Communist leader is still in the jungles on the Siamese border. He still has contacts in Malaya and China. Malaya is independent. The Communists have lost the shooting war and are now taking stock of the situation and doubtless hoping to seize their chance again in due course. However, Malaya has learned the hard way, and the implications of Communist rule are well understood by all. It is no longer likely that the Communists could count on the general support of the civilian populace, so that another Communist venture on military lines seems most unlikely. Let us hope that the lessons learned in Malaya will help bring peace soon to all of Southeast Asia.

Capt Phipps of the 1st Battalion, the Royal Hampshire Regiment, served in Malaya as an assistant G3 and assistant adjutant. A graduate of the Royal Military Academy, Sandhurst in 1948, he attended the Infantry Officers Career Course in 1961. Future assignment is expected to take him to Jamaica or England.

The preceding article is chiefly concerned with the Army's role in helping to end the guerrilla threat in Malaya. Space unfortunately does not permit the complete story as reported by Captain Phipps. It should be mentioned, however, that he gives great credit to civil authorities, and to the Special Police Force which they organized. Without their efficient cooperation, the Army's job "would have been impossible."

Welcome to Plattsburg



Maj Rolfe L. Hillman, Jr, Inf

MOBILIZATION of the Army has, from the earliest times, required expansion of the Officers' corps from civilian resources, the objects of the exercise being speed, quantity, and quality. In World War II, a keystone in the system was the Officer Candidate School, with some 500 classes being graduated from the Infantry School alone. The system was effective, and still is.

Less well remembered by the present military generation are the Plattsburg Camps, which were the foundation of a parallel service in World War I. "The Plattsburg Movement," originated in 1913, was largely motivated and in some cases financed by civilian initiative, and it made a direct contribution to the organization and training methods of the wartime Officers' Reserve Training Camps.

Captains O. O. Ellis and E. B. Garey, Infantry company commanders at the 1916 Plattsburg Camp, combined their talents to produce a handbook of training titled *The Plattsburg Manual,* which was published by the Century Company in 1917. Even by present day standards the book contains plenty of good advice for the civilian on first exposure to the military, but some portions indicate that perhaps "the Old Army" in its mobilization phase wasn't quite as tough as we are told it was.

The following extracts are from the first chapter, "General Advice," and the italicized comment is supplied free of charge by the hypothetical ghost of a first sergeant who had to implement the guidance and contend with the results.

"WHAT TO DO ON YOUR ARRIVAL"

> "There is a general rule of procedure to follow in reporting for duty at any post or training camp. 1. If you receive an order directing you to report for duty at a camp or post at a certain specified time, read it carefully, put it in a secure place, and on the day that you are to report for duty at the camp or post, present yourself in uniform, if you have one, with your order. Be careful not to lose your order or leave it at home. Have it in your pocket book."

These instructions don't really hack it. These guys should be told to pin one copy to their BVDs, one inside their hatband, put two more in their hip pocket, and keep one in their left hand all day. How does anybody expect me to keep a decent Morning Report with no orders?

> "2. Upon being assigned to a company, unless you receive orders to the contrary, report at once with baggage to your company commander (captain) whom you can easily find when you reach your barracks or company street. If you cannot locate your company commander, report to the first sergeant."

"The government does not expect anything of you except eagerness to learn and willingness to obey."

In the first place, the captain isn't just always that easy to find. If you do find him, there's no need to struggle up to him with two suitcases and your daddy's Philippine Insurrection barracks bag. And don't come looking for me if you can't find the CO. I got a company clerk right in the orderly room who knows just what to do. He'll take care of you.

"3. It is a custom of the service to have an experienced soldier explain to the new man exactly where he is to go and what he is to do. Feel no embarrassment at being ignorant of your new duties and surroundings. The Government does not expect anything of you except eagerness to learn and willingness to obey."

This first part is the actual truth, men. We got a couple of Buck Sergeants and some Corporals around here who really specialize in telling the new man "where he is to go and what he is to do." About that feeling embarrassed at being ignorant, we are plumb tolerant for the first couple of hours you're in this company. After that, we expect a little less ignorance. As to what the Government expects of you, the captain is on the right track, but he forgot to mention a little gimmick known as the Articles of War, and for some reason left out giving you the word on our Company SOP.

"4. After reporting to your company commander or first sergeant, you will have a bed assigned to you and you will be issued property and uniforms necessary for your comfort and duties. Check your property carefully as it is issued to you. You will have to sign for all of it. Look after your property at all times."

If any of you fellows get to wondering which equipment is issued for "comfort" and which is for "duty," go see the Supply Sergeant. He'll be glad to explain it.

"5. Spend all your spare time cleaning your rifle and bayonet until they satisfy your company commander. Then keep them clean."

By the way, before you have a chance to satisfy the company commander, there are a few other people who would like to take a quick look at your rifle and bayonet. This is what we of the Army call the "chain of command." Nice analogy, don't you think?

"6. Don't leave the company street or barracks on the first day, except with the permission of your company commander. Don't ask for this permission unless you have a valid reason."

This also applies to the next 59 days after the first day.

"RULES OF CONDUCT FOR CAMP LIFE"

"The first few days will be easy if you will read carefully and adhere to the following plan of procedure:"

"1. Get up at the first note of reveille and get quickly into proper uniform."

Better yet, get up about two hours before reveille, and finish cleaning that rifle.

"2. Get within two or three feet of your place in ranks and await the sounding of assembly for reveille and then step into ranks."

We've had a couple of wise guys around here who think it's real funny to dash into ranks on the last note of assembly, but it didn't get 'em any Brownie Points. Be a little nonchalant about it—lurk three or four feet away, then amble into ranks.

"3. After reveille, make up your bed, arrange neatly your equipment, and clean up the ground under and around your cot. The company commander will require the beds made up and the equipment arranged in a prescribed way."

A couple of additional notes here. It is like a nickel should bounce very high when dropped on the blanket. You will come to understand. I warned you earlier about the "prescribed way" business.

"4. Wash for breakfast."

Quoted material copyrighted by Appleton-Century-Croft, Inc., and is published by permission. This material may not be reproduced without specific permission of Appleton-Century-Croft, Inc.—Photos from the National Archives

MAJ HILLMAN, who is chief, G1 Personnel Policy Section, Headquarters, USAIC, is a 1945 graduate of the United States Military Academy. His assignments include Japan, Korea, and Austria, and in 1956 the Command and General Staff College, Fort Leavenworth, Kan.

Or, if you want to go to breakfast dirty, go ahead. This isn't a young ladies' finishing school.

"5. Upon returning from breakfast, go at once to the toilet. Next, prepare the equipment prescribed to be worn to drill. This is especially important when the full pack is prescribed. Assist your tent mates in policing the ground in and around your tent."

Men, this Rule 5 should have been revised long ago. We found out in a hurry that it's just dern impossible for 156 men to "go at once to the toilet" on 5 johns. Some pretty bad bruises and couple of fractures resulted. Likewise, the "assist your tent mates" part is a big understatement. You shoulda seen the last man that decided not to assist.

"6. If you need medical attention, give your name to the first sergeant at reveille and report to the hospital, but go as soon as you feel in the least unwell."

So help me, this is the one that nearly drove me out of the Army. Right after this rule went into print, we didn't have anything over a squad for drill for the next three weeks. The Medics set up such a howl that I've been giving them a hand by some preliminary screening and diagnosis.

"7. After morning drill, get ready for dinner. Get a little rest at this time if possible."

The mess sergeant will take care of your dinner, and I will take care of your rest time.

"8. After dinner a short rest is usually allowed before the afternoon drill. Take advantage of this opportunity; get off your feet and rest. Be quiet so that your tent mates may rest."

Sometimes I wonder if those captains really know what goes on around this company!

"9. Following the afternoon drill there is a short intermission before the ceremony of retreat. During this time take a quick bath, shave, get into proper uniform for retreat, shine your shoes and brush your clothes and hat. Be the neatest man in the company."

If you can do all the above in 16 minutes, you're the caliber man the Army wants.

"10. Supper usually follows retreat."

In most companies, supper always *follows retreat, but we are blessed with Sergeant Donovan as head hash-slinger, and sometimes nothing at all follows retreat.*

"11. After supper, you usually have some spare time until taps. The YMCA generally provides a place supplied with newspapers, good magazines, and writing material. Don't forget to write the folks back home."

". . . and, on the day that you are to report for duty at the camp or post, present yourself in uniform, if you have one, with your order."

But don't *write your Congressman. He is a very busy man—war legislation and all that.*

"12. Be in bed with lights out at taps. After taps and before reveille, remain silent, thus showing consideration for those who are sleeping or trying to sleep."

Your squad leader will be glad to show you how to drape a blanket over yourself and clean rifle and shine boots by candle light in complete silence. Don't go dropping the can of bore cleaner. Some nights, there is an entire squad of men under blankets cleaning rifles and shining boots.

"13. Get all your orders from (a) the bulletin board, (b) the first sergeant, (c) the acting noncommissioned officers, (d) the company commander. Don't put much faith in rumors."

Men just concentrate your attention on (b) above, and don't put any *faith in rumors!*

". . . but go as soon as you feel in the least unwell."

This department provides important information on policies and personnel actions which affect your Infantry career. Material for Active Army officers is furnished by Infantry Officers Division, OAD, DCSPER, DA. Information for USAR officers and enlisted Infantrymen is obtained from other Department of the Army agencies.

What is Considered Troop Duty?
What is Command Duty?
How Much Do I Need?

These questions frequently are raised during interviews with Infantrymen and the answers are not as easily supplied as it might appear.

First, the purpose of troop and command duty must be considered. The purpose briefly is to train and develop the Infantry officer so that he in turn can train, prepare, and lead our combat forces in both peace and war.

What is troop duty? It is any duty within an Infantry (or combat arm) brigade, battle group, or battalion. It applies equally to a training center brigade, regiment, or battalion. For example, an S3 of a battle group is serving in a troop duty assignment.

What is Infantry command duty? It is command of an Infantry unit: a platoon, company, or some other unit in a TOE organization; or a platoon, company, or unit in an Infantry training center. Command of an Infantry unit in a training center counts the same as command of a TOE unit. Both are equally important and both are equally demanding. The manner with which the officer performs his leadership functions is what counts on the record. The knowledge and experience which he gains is what counts in the long run.

How much troop duty do I need? This is most difficult to answer. History shows that some people master the techniques of command and leadership quickly and with little difficulty. Others may never master these techniques. As a general rule, we think that an Infantryman should serve a minimum of one tour in an Infantry unit in each grade. He should be given the opportunity to command a platoon, company (battalion) and battle group. If he successfully serves in these assignments, then there is every evidence that he will be a successful commander under any circumstances.

Overseas Assignment Policy

Now that the directive to reduce the number of overseas dependents has been revoked, Infantry Branch will continue to follow previous overseas assignment policies with one exception—the assignment of obligated two-year lieutenants to USAREUR—Germany. Starting in January 1961, we began assigning a proportionate number of obligated officers to USAREUR after they complete the Infantry Officer Orientation Course. Normally, the obligated tour lieutenant has from 18 to 21 months remaining service when he arrives overseas. Unless he has been accepted for Regular Army, or approved for an indefinite active duty category, this is the length of his tour. Those integrated in the RA or given an indefinite category will be required to serve a normal tour.

Overseas assignments are determined by officer requirements and vacancies in overseas units. A vacancy must exist before an assignment can be made; consequently, officers who may desire an overseas tour cannot always receive such an assignment.

Many factors, such as promotions, overseas extensions, and increased and decreased strength authorizations cause overseas requirements to change. It is therefore extremely difficult to predict the exact month that an officer may be ordered overseas. Officers are selected for overseas assignments according to:

a. Amount of time in CONUS or at a CONUS station. The amount of time which an officer spends in CONUS before, or between, an overseas assignment varies according to his grade. For example, Captains may remain in CONUS longer than Majors. The amount of time in CONUS may change within a particular grade as overseas requirements change.

b. Availability of the officer. This means the time or time frame that a particular officer is available for overseas service. One example is an officer attending a service school and not available until graduation day. Another example is an officer approaching retirement who is available only as long as he has sufficient service remaining to complete an overseas tour.

c. Qualification of the officer. Self explanatory.

In general, officers who have been in CONUS the longest time are the first selected for overseas assignments. Again, this must be tempered with (1) needs of the service, (2) availability of the officer, and (3) qualification of the individual officer.

Infantry Branch policy is to alternate the type of overseas tours. For example, an officer who last

served a family-separated tour will be sent to an overseas area where his family can accompany or join him.

Infantry Branch policy is not to assign an officer to a second family-separated tour if there is an officer available in the same grade who has not served a first family-separated tour. In this respect, there are a few Infantry field grade officers who have not yet served a family-separated tour, but this number is small and it is decreasing each month. Field grade officers who have not served a family-separated tour can expect such an assignment when they become available for reassignment.

Post-Graduate Civil Schooling (AR 350-200, AR 350-205)

There is a growing need for officers trained at the graduate level in the physical sciences. Although this need exists, application is not tantamount to selection. Officers who fit these qualifications are encouraged to apply for the physical sciences:

a. Completion of the Infantry Officers Career Course. You may apply even if you have not yet attended; however, you will not be selected for attendance until completion of the Career Course.

b. A good undergraduate academic record that includes physics and mathematics (through calculus).

c. A record of outstanding performance in previous military assignments.

Outstanding officers are also encouraged to apply for the social sciences. Limited quotas compared with the number of applicants in the social sciences makes selections much more competitive than in the physical sciences. Infantry officers are not eligible for attendance in the social sciences until completion of Command and General Staff College.

Infantry officers cannot be considered for selection to Post-Graduate Civil Schooling until:

a. Completion of two years on station in CONUS (three years for certain stabilized assignments).

b. Completion of at least 5/6 of an overseas assignment.

c. Completion of the level of military schooling as indicated above.

An application may be made at any time. It remains active until the officer withdraws his application, refuses training for which selected, or is no longer eligible by virtue of age. Present policy is to return an application when the officer reaches age 40.

The following areas of study have been, in the past, those in which Infantry has had the greatest need for outstanding applicants:

Aeronautical Engineering, Basic Space Physics, Electronics, Guided Missiles, Mechanical Engineering, Nuclear Physics, Operation Research, Business Administration, Comptrollership, Geography, Journalism, Psychology and Human Development.

It should be remembered that this program is highly competitive. Within quota limitations, selections are based on a detailed, comparative evaluation of the records of all officers who apply.

Degree Completion Program

Officers applying for the Degree Completion Program should read paragraph 11c, AR 621-5, dated 7 December 1960, thoroughly, to preclude administrative errors that delay the processing of applications. The following points of interpretation are particularly significant:

1. Legal training leading to a law degree is not authorized under the Degree Completion Program.

2. Twelve months are authorized to obtain a baccalaureate degree; however, only a limited number of officers with outstanding records will receive this amount of time. An officer should point toward being able to complete degree requirements within 6 to 8 months to enhance selection chances.

3. An officer must have a minimum of 3 years' *continuous active Federal commissioned* service at the time he wishes to enter school. A reasonable amount of time above the "15 years' service for retirement purposes" may be waived. However, waivers will not be granted if the officer is unable to complete the four-year service commitment upon completion of training. An assumption cannot be made that the officer *may* be retained beyond the mandatory 20-year retirement date.

4. Single officers will not receive basic allowance for quarters while attending school.

5. An officer selected for training who has not been on station for a minimum of 2 years (3 years on some stabilized assignments), and who requests a starting date which is prior to completion of the required time on station, will be sent, with the concurrence of his command, in a TDY-and-return status.

6. The maximum time authorized for curtailment of overseas tours is 45 days.

7. Applications must be sent through channels.

8. The letter of acceptance from the university or college must specify exact dates of each period of attendance (quarter, semester, summer session). It must also state the number of semesters, quarters, or summer sessions required.

Aviation Training Available for Lts and Lt Cols

The Army will enter a large number of Lieutenants and a limited number of Lt Colonels in the Army Aviation Program again in FY 62. No Captains, Majors, or Colonels will be trained this year. Lieutenants desiring flight training should apply under the provisions of AR 611-110. Lt Colonels may submit statements of interest as prescribed by the same regulation. Lt Colonels who applied in 1956 or later need *not* reapply, as their applications remain active and are considered each year so long as the applicants are eligible. Selection for the Aviation Program is competitive for Lieutenants as well as Lt Colonels. Lieutenants cannot expect to receive a definite answer on their applications in less than 2-3 months.

Results of January Questionnaire

As or our copy deadline for this issue, we had received something along the order of 300 questionnaires at our office. This, for the total number of suscribers, is small, but we nevertheless received some valuable comments. Among the most welcomed information was the vast list of suggested subjects for future issues. Below is a partial list of the often-repeated ones in event there are writers among you who would like to tackle these areas. The full list will be mimeographed and circulated throughout the Infantry School, and special problem areas will be identified for those agencies which can best prepare material for us.

The most unwelcome news is that concerning why there are large numbers of Infantrymen who do not subscribe to *Infantry* Magazine. The two answers which far and away took first place were disquieting. The first (in order of frequency) was that too few people knew about the magazine. We have been working on that problem, and need your continued support there. The second most stated reason, and it lacked only one point of tying with the first reason, was that the officers and enlisted men did not care about being professional. Such adjectives as *indifferent, lackadaisical,* and *apathetic* cropped up often. This, coming as it did from within the military and from all parts of the world, is alarming. Maybe it would behoove interested folks to do some earnest "motivating" in this corner, and other problems might then straighten themselves out.

A rough tally shows the following reaction to our easy-to-answer questions:

50 to 1 favor "tricks of the trade" type articles.
2 to 1 favor fiction vehicles for tactical articles.
10 to 1 favor pure fiction *once in a while.*
3 out of 5 say the matter of doctrine does not influence their reading.
Half say we are (are not) stereotyped in style.
Half say we should (should not) stay within company level on tactics. However, most "no" votes say to stay within the battle group level.

The message is clear, and we will try our best to acceed to the trends indicated by your answers. Naturally enough, we won't be able to please all of you always.

The following subjects were requested by at least five persons, and are shown (as a matter of interest) in order of most requested down to least requested (only 5 answers):

Survival, to include escape and evasion.
Foreign army tactics, weapons, and equipment.
Guerrilla warfare, to include all "unconventional" warfare.
Special warfare environments and how to operate there.
How other combat and supporting arms work with Infantry.
First aid and sanitation. (This one surprised us.)
Psychological warfare, with emphasis on how to combat it.
Historical examples, chiefly at lower echelons.
USAR and NG programs, including all facets.
Use of nuclear weapons, especially Davy Crockett.
Company and platoon night fighting tactics and techniques.

If you send us an article, please remember to include a stamped return envelope with your manuscript, and a short biographical sketch of yourself.

What Others Say

"Many ROTC Cadets are still unsure of their branch, or are unaware that a magazine such as *Infantry* exists. As an ROTC Cadet, I eagerly digest all information given, and I'm sure it will be valuable to me no matter what my branch is." *ROTC Cadet, Ohio University*

"Here at the Academy are many men with a wealth of ideas but no outlet for them. *Infantry* just might be the media for bringing such ideas to reality." *Cadet, United States Military Academy*

"Not so much about Majors, Colonels and Generals. Write more about the little shots—NCOs, Lieutenants and Captains. There are more of them." *SP4, Georgia National Guard*

"I think there is too much on battle group tactics. The majority of *Infantry* readers are NCOs and lower-grade EM who are concerned more with small unit tactics." *SP5, New York National Guard*

"Don't exclude higher level tactics, but let's face it, our job is to train small units." *SFC, Florida National Guard*

"At times, all of us may be classified as non-conformists. That's why many 'non-doctrine' articles are especially enjoyable." *MSGT, Fort Dix, New Jersey*

"*Infantry* could be improved by less theorizing with the future while giving more attention to the present." *2nd Lt, Delaware National Guard*

"I think controversy about doctrine is the best way to improve the services. It stimulates much healthy thought." *1st Lt, Fort Lewis, Washington*

"Let's have articles about higher level tactics. Professionals who are reading *Infantry* now would soon be at higher levels if we went to war now." *Capt, Columbia University Graduate School*

"Keep up the thought-provoking articles on *future* battlefield conditions and weapons." *Maj, ROTC Instructor Group*

More questionnaire replies may be found on page 58.

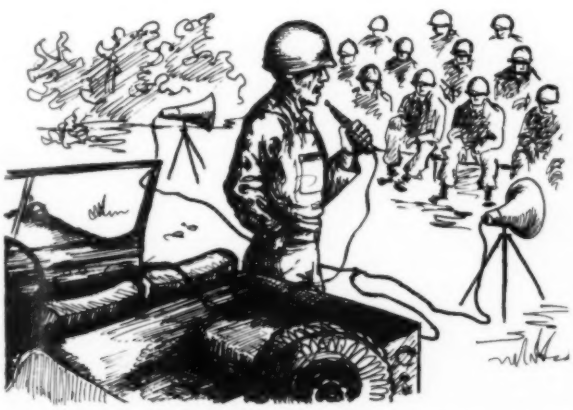
TRICKS OF THE TRADE

Lt Frank L. Mills, Inf

Public address systems are used for many varied purposes such as communicating with a large group of personnel, control, and playing calls within buildings and within unit areas. This creates a considerable problem to Battle Group Communication Officers, particularly in that area where the unit's primary mission is training BCTs and AITs, because of the insufficient number of public address systems that are authorized. TA-20-2 authorizes ten Public Address Systems AN/TIQ-2 to the battle group or comparable size unit. This is an insufficient number of public address sets, particularly if the battle group has five companies in cycle at the same period. This is doubly inadequate if the firing ranges are not wired for sound. At most training installations, the ranges are not wired for sound and the using unit has to furnish its own sound source or request it from higher headquarters.

I have devised a solution to this problem which has been of considerable aid and which involves no additional expense to the government for additional equipment. The equipment is already within the battle group and is rarely in constant use, particularly in training units. This field expedient public address set can be constructed in the following manner:

1. Borrow an Amplifier, AM-65, from the Radio Set, AN/VRC-15, in the Combat Support Company. Mount it to the bottom of the glove compartment of the company commander's vehicle by using two thin strips of aluminum or other salvage material, and bolt it securely. It is steady, secure, convenient, and out of the way.



2. Take an ordinary Power In cable that can be found in any post salvage yard and attach it to the vehicle battery by means of two large alligator clips. For power to the amplifier, merely screw the Power In connector of the cable to the Power In receptacle on the amplifier and turn the set on. Thus far, you have whipped the problem of an amplifier and a power source.

3. Take a Microphone, M-29, and the two Loudspeakers, LS-166, from the company commander's own Radio Set AN/VRQ-3 and attach the microphone to one of the audio connectors on the amplifier. Borrow an interconnecting cable, J-654, from the Control Group in the company and connect it to the other audio connector on the amplifier.

4. Take the two Loudspeakers, LS-166, and plug the audio cables into the audio connectors on the interconnecting cable, J-654. Turn the set to the ON position and broadcast. The two loudspeakers project sound sufficiently so that an instructor speaking to two hundred men is easily understood without straining his voice.

This field expedient public address set is adaptable for use on short ranges such as a Target Detection range, for periods of instruction where mobility and speed are required, for dismounted drill, for physical training classes, and so on.

It is mobile in that there is no time loss in placing out the equipment for operation and picking it up again to move to a new location. The equipment is small and is generally available within the unit. It eliminates the need for transportation of generators to be used for power sources. Idling the engine ten minutes out of each hour is sufficient to keep the vehicle battery charged.

Initial installation time of this set is approximately thirty minutes. It can be left permanently attached, or it can be arranged so that it is removable within a matter of minutes. As a safety precaution, always disconnect the power cable from the vehicle battery terminals when the set is not in use.

I have found this set to be especially adaptable for those sudden commitments given to the Battle Group Communication Platoon, as well as for standing commitments such as tornado alert warnings that must be disseminated to dependent housing areas at this installation. Other units at this post have used the idea satisfactorily, and perhaps communications officers at other installations can benefit also.

What's Your TEQ?

INFANTRY SCHOOL DOCTRINE

Lt Col A. E. Seifert, Armor

If an ignorant jungle tribesman found a loaded rifle, he'd probably use it as a handy club to defend himself. It could be effective when used in this manner, no doubt, but certainly the fullest advantages would be lost. While the tank platoon is not as unfamiliar to the Infantry company commander, there may be times when the maximum advantages of an attached platoon are not fully exploited. This is often occasioned by a lack of familiarity with the tank's capabilities and limitations. So let's take a look at the beast, considering its characteristics and a few basic techniques of employment. Then in a few simple situations you will be able to test your own TEQ*.

Basically the tank is a mobile gun platform. Armor plate enables the crew to move and shoot with a high degree of protection, but the gun is the thing. And it can move quickly from one point on the battlefield to another. The tank carries about 60 rounds of ammunition for the main gun, including armor defeating, high explosive, and smoke rounds. Machinegun ammunition is relatively restricted, running from about 6500 rounds of .30 caliber or 7.62mm to 1260 rounds of .50 caliber.

Besides being able to move and shoot, the tank is equipped with excellent radio facilities. If you, as a rifle company commander, should have communication difficulties, remember that tanks can be used to communicate with Battle Group headquarters. Each tank has two transceivers, and the platoon leader and platoon sergeant have an auxiliary receiver which can monitor a third net. When attached, this platoon will respond to radio instructions you may give over your command net.

Along with all these advantages, however, are some disadvantages. Among the greatest are the tank's size and weight, the ever-present maintenance chore, and the noise of a moving tank. Another shortcoming is the tank's restricted visibility when "buttoned-up." These disadvantages must be compensated for or at least minimized. Timely engineer effort can reinforce bridges and otherwise assist movement of tanks. Periods must be set aside to permit required maintenance. Artillery, Army aircraft, and loudspeaker devices can cover up tank noises. To provide close-in protection for tanks during periods of limited visibility or in close terrain, dismounted Infantrymen are essential.

The firepower, mobility and communications capabilities of the tank are mechanical. A tank attack possesses another characteristic which is less readily apparent. The formidable appearance of a line of tanks weighing over 50 crushing tons each, moving at high speed directly toward the enemy with all guns raking his position, produces a psychological effect. This effect, termed shock-action, causes even the most seasoned veteran to hesitate to fire.

Since Infantry will not always be dismounted, it might be well to devote a few lines to their means of transportation when mechanized —the armored personnel carrier. This vehicle provides light armor protection and good cross-country mobility for Infantrymen. It is capable of swimming inland waterways and affords some shielding from nuclear weapons effect. Perhaps the most important factor to be borne in mind is that the APC is not a tank and should not be used as such. The Infantry squad moving in its carrier possesses all the disadvantages of a tank, but has few of its advantages. The firepower of the squad while mounted is limited to one .50-caliber machinegun; visibility is restricted to the same degree as a tank; and the light armor protection makes the squad vulnerable to direct fire weapons.

The characteristics of the tank

*"TANK EMPLOYMENT QUOTIENT"

have a direct bearing on its tactical employment. Let's consider some fundamentals of using tanks in support of Infantry. There are several methods, but these might be reduced to: fighting either as separate but mutually supporting elements, or fighting together as an integrated force. If an avenue of approach to the objective is open (terrain without natural or man-made obstacles), this is made to order for tanks. Should the riflemen follow on foot, though, the tanks would have to slow their attack to a walk or end up in the midst of the enemy position, easy prey for a tank-hunter team. With armored personnel carriers available, Infantry could be brought up behind the tanks and thus be quickly available when needed.

Where the situation permits, it is usually a better solution to attack an objective using two converging axes. This divides the enemy's attention and forces him to fight in two directions. An occasion may arise where there is an open approach on one flank and a closely wooded approach on the other. This situation lends itself to a tank attack on the open approach, with or without mounted Infantry, and a dismounted Infantry attack through the woods. The assault must be timed so that the tanks and Infantry arrive on the objective together. Obviously an operation of this kind must be carefully coordinated to prevent the tank fires from jeopardizing the Infantry. The question frequently arises, what if the tanks run into a minefield? Well, that's one of the hazards of the occupation. In this case the remaining tanks might seek a bypass or defend themselves and the Infantry with fire, to include use of smoke if necessary, until riflemen can be made available to breach the minefield.

While the above situation described the use of tanks on one axis and Infantry on the other, it is important to bear in mind that on the wooded approach the riflemen were dismounted. Normally, when Infantry attacks mounted in armored personnel carriers, tanks must accompany them. The only exception to this is an attack against a hastily organized position or one that has been completely devastated, as by nuclear fires. Where tanks and mounted Infantry can attack on converging axes, the maximum surprise effect is normally achieved.

Until they dismount, riflemen cannot actively engage the enemy. This raises two problems which confront the mechanized rifle company commander: how closely should the carriers follow the tanks, and when should the Infantry dismount. Carriers can follow the tanks either by bounds or by continuous movement at a distance dictated by the enemy and terrain. Basically, tanks should have rapid Infantry support when needed, but carriers must not be exposed to effective enemy fire. At the same time, carriers cannot be so far back that enemy tanks can cut them off. By continuous evaluation of the situation, the company commander determines what solution offers the best chance of success. As for *where* the Infantry should dismount, this should be as far forward as possible without subjecting the carriers to effective fire. In this manner the speed of attack can be maintained while minimizing casualties and conserving the rifleman's energy.

Another manner of employing tanks in support of Infantry is to have tanks support by fire only. This is the least desirable employment. Sometimes, however, there is no other solution, as in the case of a river crossing. Here the mobility and shock action of the tank is lost, but its fires can greatly assist in covering the Infantry crossing.

Regardless of how you plan to employ the attached tank platoon, there is a fundamental near and dear to the hearts of all tankers: try not to split the platoon. Splitting the platoon is as abhorrent to a tank platoon leader as it is to the mortar platoon leader. For one thing, the unit is more effective when employed as a platoon. The platoon leader can use fire and maneuver with two sections, something he cannot do with the unit split. As long as the tank platoon leader is capable of controlling his tanks, there is no need for attaching sections to rifle platoons.

With this brief review of fundamentals, check your TEQ by solving the following problems. In each situation, you are the rifle company commander, with tanks and sufficient armored personnel carriers attached to mechanize your company. Note that the elements of METT (mission, enemy, terrain and weather, troops and fire support available) are different for each situation. For simplicity and brevity of presentation, designation of reserves and employment of other fire support elements have been intentionally omitted. Circle the plan of maneuver you consider best of those presented for each problem.

SITUATION A. (Figure 1) You are located on Hill 336.

Mission: Seize Objective BOOTS.

Enemy: Two Aggressor rifle platoons with two towed AT guns.

Terrain: See Figure 1.

Troops Available: One rifle company, one tank platoon.

Plans:

1. Attack on Approach B with dismounted rifle platoons; tanks support by fire Hill 336 initially and attack on Approach C on order.

2. Attack on Approach B with

Lt Col Seifert enlisted in 1935 and received, in 1942, his commission from the United States Military Academy. His assignments include assistant G3, USAREUR, and as MAAG to Japan. He is now chairman, Armor Committee, Command and Staff Department, USAIS, Fort Benning, Ga.

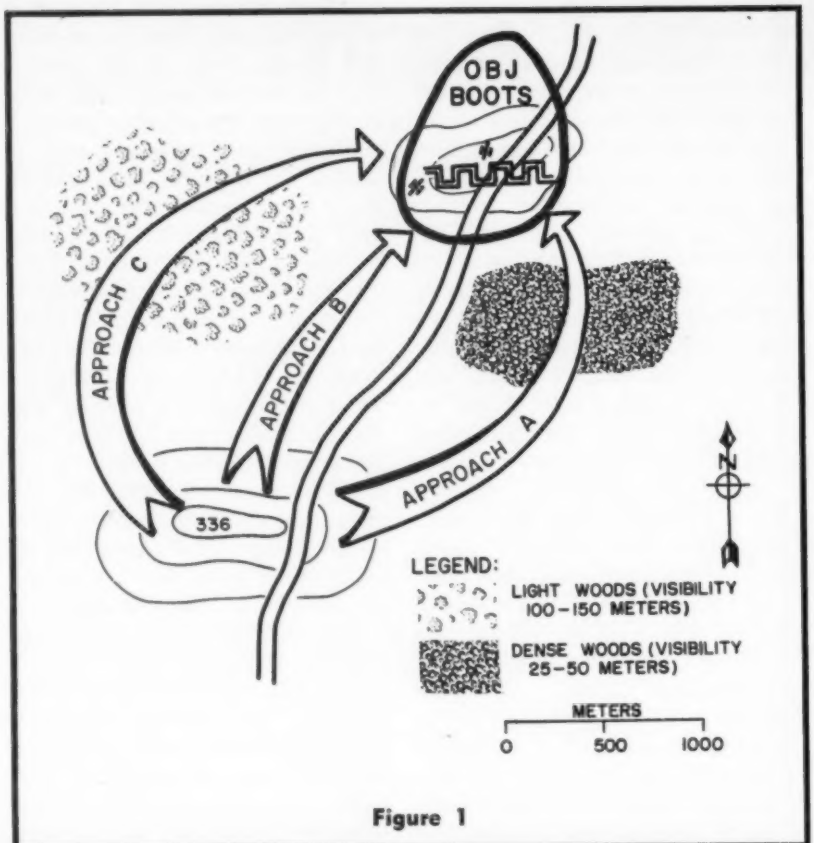


Figure 1

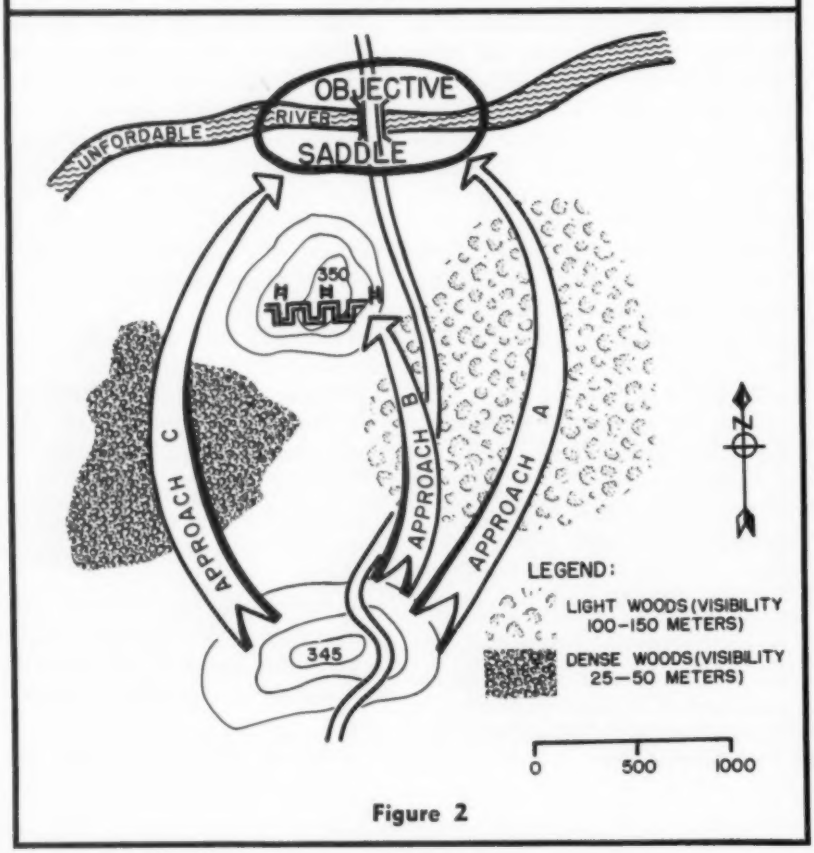


Figure 2

two mounted rifle platoons and one tank section; tank platoon (-) and one mounted rifle platoon attack on Approach A.

3. Attack on Approach C with two dismounted rifle platoons; tank platoon and one mounted rifle platoon attack on Approach A.

4. Attack on Approach B with tank platoon and mounted rifle platoons.

SITUATION B. (Figure 2) You are located on Hill 345.

Mission: Seize Objective SADDLE without delay.

Enemy: One aggressor rifle platoon supported by three tanks.

Terrain: See Figure 2.

Troops Available: One rifle company and two tank platoons.

Plans:

1. Attack with one tank platoon and two mounted rifle platoons on Approach C; attack with one tank platoon and one mounted rifle platoon on Approach A.

2. One tank platoon and two mounted rifle platoons attack Hill 350 on Approach B then be prepared to assist in seizure of Objective SADDLE; in coordination with attack on Hill 350, one tank and one mounted rifle platoon attack on Approach A to seize Objective SADDLE.

3. Attack on Approach A with entire force mounted, tank platoons leading.

4. Two tank platoons and one mounted rifle platoon attack Hill 350 on Approach B, then be prepared to assist in seizure of Objective SADDLE; in coordination with attack on Hill 350, two rifle platoons attack mounted on Approach A to seize Objective SADDLE.

SITUATION C. (Figure 3) You are located at Hill 305.

Mission: Seize Objective BRIDLE.

Enemy: Two rifle platoons with two self-propelled AT guns.

Terrain: See Figure 3. The river is unfordable. Crossing sites X, Y, and Z are secure.

Troops Available: One rifle company and one tank platoon.

1. Attack with one tank section

supporting by fire from crossing site X, tank platoon (-) from crossing site Y; cross one rifle platoon in APC at Site X to attack objective on Approach C dismounted, cross company (-) in APC at site Y to attack objective on Approach B dismounted.

2. Tank platoon support by fire from crossing site Z; rifle company cross in APC at site Z, attack objective on Approach A dismounted.

3. Tank platoon support by fire from Hill 305; cross one rifle platoon in APC at site X to attack objective on Approach C dismounted; cross company (-) in APC at site Z, attack objective on Approach A mounted.

4. Tank platoon support by fire from Hill 305; cross company at site Z in APC to attack objective on Approach A dismounted.

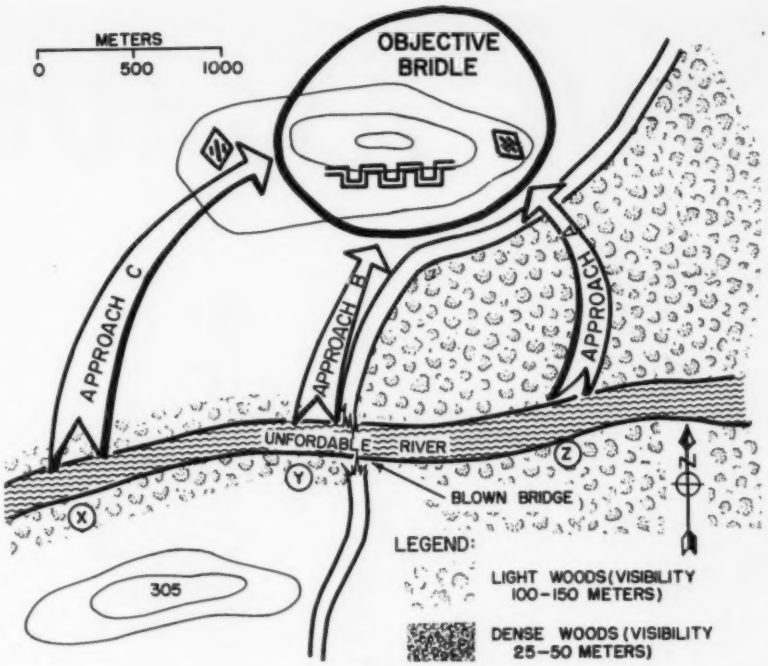


Figure 3

SOLUTIONS

SITUATION A. Plan 3 (30 points) Plan 1 was discarded because the Infantry would be required to make a slow dismounted frontal attack across open terrain and because much of the mobility and shock action of the tanks was sacrificed. Plan 2 was discarded because it split the tank platoon and failed to take advantage of the existing concealed avenue of approach. Plan 4 was discarded because it called for a frontal attack over open terrain which the enemy could easily cover from concealed and dug-in positions. Plan 3 was selected because it forced the enemy to fight in two directions, promised to achieve a degree of surprise, and would probably result in fewer casualties. This attack would be carefully coordinated to permit both forces to assault the objective simultaneously.

SITUATION B. Plan 2. (40 points) Plan 1 was discarded because it required mounted forces to proceed through dense woods on Approach C and made no provision to neutralize the mobile enemy force which would be positioned on our flanks and rear. Plan 3 is considered the second-best solution, but this attack also failed to provide for the enemy force. This element is too dangerous to leave unattended on our flank and rear. For the reader who considered he could achieve the objective and then deal with the enemy, take 30 points. Plan 4 was discarded because it made no provision for tanks to accompany the mounted force on Approach A. Plan 2 provided for speed in securing the objective while at the same time neutralizing the enemy force. The force moving on Approach B would have engaged the enemy before the force on Approach A crossed the open area to the bridge.

SITUATION C. Plan 4. (30 points) Plan 1 was discarded because it split the tank platoon, utilized inferior positions for supporting tank fire, and utilized two open avenues of approach. Plan 2 was rejected because it also employed poor firing positions for the supporting tanks. Visibility in the light woods is limited to 100-150 meters. Plan 3 was unacceptable because it utilized an open approach and attacked through hostile terrain mounted without tanks. Plan 4 provided for getting the Infantry across (including the assault weapons and vehicles), used the best avenue of approach, and employed firing positions which permit continuous close supporting tank fires.

TEQ 90-100 is excellent.

TEQ 70 is fair. Anything less than 70 indicates a need for review.

In summary, the tank is basically another weapon which augments the Infantry firepower. Fires controlled and directed by the tank platoon leader are in most instances more effective than those controlled by sections attached to rifle platoons. Whenever tanks are required to attack through dense woods, dismounted Infantry will normally accompany them. On the other hand, when Infantry attacks mounted, tanks normally accompany the carriers. The mobility inherent in tanks adds flexibility and versatility to the attack and together with available fire power they provide a high degree of violence. In the final analysis, it is up to the commander to determine the best solution in any given situation. And, like the savage, whether he exploits the capabilities of his weapons to the fullest or not will depend on his knowledge and ability.

THE ASSAULT

RECENT inquiries from the field received by the Infantry School indicate that there is a need for clarification of doctrine concerning the conduct of the assault phase of a dismounted daylight attack by Infantry small units. The Infantry School, in close coordination with USCONARC, has reviewed all aspects of assault fire doctrine and the conclusions resulting from this review are contained in this article. The following are typical of the questions received, and the answers to them should clarify and amplify current doctrine.

What is the assault?

It is the final phase of the attack in which the attacking troops close with the enemy to destroy or capture him. It is the climax of the attack.

Prior to making an attack, of course, leaders of the unit participating in it have made plans and reconnaissance, issued orders, and have made preparations concerning ammunition, rations, etc. As a result of this planning, the movement from the assembly area is timed so that the leading elements of the unit cross the line of departure at the specified time. After crossing the line of departure, the maneuver element of the unit makes a rapid and continuous advance to the assault line.

This article was prepared by the Attack Committee of the Ranger Department, USAIS.

Where should the assault line be located?

A tentative assault line is selected by the platoon leader during the planning phase of the attack. It should be located so as to place the assaulting troops in the most favorable position for launching the assault, preferably on the enemy side of any major obstacle, either natural or manmade. In addition, it should be as close to the enemy position as the platoon can advance without receiving excessive casualties from friendly supporting fires, and without being forced to deploy prematurely by enemy fire. The selection of the actual assault line is made by the platoon leader as the platoon nears the tentative assault line and is based on the situation at this time.

In case of a coordinated company attack on a single objective, the company commander will select the assault line.

Are bayonets fixed immediately prior to commencement of the assault?

Bayonets should be fixed when the platoon is in the attack position. When no attack position is used, bayonets are fixed before the platoon crosses the line of departure.

How are the platoon's machineguns employed during the attack?

If possible, both machineguns should be positioned so that they can support the platoon's advance toward the assault line and during the assault. Ideally, they should be able to deliver a devastating volume of fire on the objective for the longest possible time without their fires becoming masked by friendly troops in order to force the enemy to remain in covered positions and prevent his interference with the advance. In selecting positions for the machineguns, fields of fire, routes for forward displacement, and the role and tentative position of each in the platoon's consolidation on the objective will, of course, be considered.

When does the assault begin?

The distance at which the assault should begin is dictated, as mentioned earlier, by how close the attacking force can get to the objective without taking excessive casualties from friendly supporting fires. Because of the characteristics of typical supporting weapons, this distance will generally be 100-150 meters. However, if supporting fires and terrain permit, it could be considerably less. Certain weapons, such as machineguns, if firing from the flanks, can continue to support the assault after artillery and mortars have shifted their fires. The assault begins then, when the preponderance of supporting fires shift. Deployment is effected rapidly without halting at the assault line. As the riflemen deploy, they begin firing well-aimed shots from the shoulder at known or suspected positions on the objective. If there is a possibility of gaining surprise, the rifle squads move forward in a platoon line formation and commence firing on the platoon leader's order.

Do the assaulting troops fire from the shoulder or from the underarm position?

Both of these positions are used. As the troops begin the assault, they advance, pausing momentarily every few steps to fire well-aimed shots from the shoulder position at known or suspected enemy positions. It must be emphasized that throughout the assault the general forward movement of the unit is maintained and a heavy, sustained volume of fire must be delivered, increasing in intensity as the assaulting troops close with the defender. As the riflemen near an enemy position (approximately 30 meters), they move more rapidly, increasing their rate of fire using *either* the shoulder or underarm position.

The final phase of the assault is conducted with as much violence and speed as are compatible with control. Since the riflemen are moving quickly, they use the underarm position to insure their unobstructed vision and firm footing. If an individual rifleman observes a live target during the final phase of the assault, he should pause only long enough to take it under fire with a well-aimed shot from the shoulder. It is recognized that even when using the underarm position, there are some occasions when it is appropriate to pause while firing in order to assure a better directed shot. Under most conditions, unless there is a slight pause, a well-aimed or directed shot cannot be delivered.

If the assaulting element is halted by enemy fire, what should be done?

Forward movement should continue by use of fire and maneuver. When supporting fires have not been successful, and as long as superiority of fire remains in the balance, this is the only means by which forward movement may take place. All available fire must be brought to bear against the specific enemy positions offering resistance in order that the advance may be resumed. Some of the means immediately available to the rifle platoon leader to accomplish this are employment of the 3.5-inch rocket launcher, shifting of fires of one or both of his machineguns, shifting of indirect supporting fires, and the use of hand grenades by individual rifleman who are within throwing range of the enemy.

Do squad leaders and fire team leaders fire their weapons during the assault?

During the assault, the squad leader must control the rate of fire of his squad, as well as the rate and direction of movement. To do this, he should position himself behind the squad line. He normally does not fire unless his fire is needed to assist the advance of the squad. Each fire team leader, positioned near the center of his fire team, assists the squad leader in controlling the rate and direction of movement, and rate of fire. He is a fighter-leader who participates in the assault fire. The fire team leader, by direction and example, insures the rapid and aggressive execution of the squad leader's commands.

How far should the assault progress on the objective?

The assaulting troops must sweep the objective to insure that effective resistance has been eliminated. They move beyond the objective so that during the consolidation they control by fire the likely approach routes for an enemy counterattack. The assault, therefore, is considered terminated as soon as effective resistance is eliminated and the platoon begins its consolidation.

Readers who wish further amplification on this subject or those who have additional queries concerning assault fire doctrine are encouraged to submit their questions to Infantry.— Editor.

KWANGSI
NORTH
VIETNAM
HANOI
GULF OF TONKIN
LAOS
Mekong
Nakhon
THAILAND
BANGKOK
CAMBODIA
PHNOM PENH

LAOS

Laos, a landlocked kingdom only a little larger than Utah, contains a population of approximately 1.7 million. In general, these inhabitants are either ignorant of, or indifferent to, the international ramifications of their country. There is very little exploitation of the country's natural resources, and there has been little impact on world affairs until recently. Because Laos borders China, Burma, Thailand, Cambodia, South Vietnam, and North Vietnam, it has considerable strategic importance.

Terrain

Laos is comprised mostly of mountains, with the major chain and its extremities covering about two-thirds of the country. These are rugged and jagged mountains whose peaks rise to more than 8000 feet in the north and 5000 feet in the south. Aside from the river valleys, there are only two level areas of appreciable size, the Bolovens and Tran Nink plateaus.

The MEKONG River is the only major river of the country, and for some 500 miles it forms the common border between Laos and both Burma and Thailand. In the dry season this river will run as low as two feet, and in the wet season as high as 20 feet. There are numerous tributaries which flow west and south into the Mekong, the major one being the HAU which meanders through north-central Laos. The lowlands immediately adjacent to these rivers and tributaries are the most populated areas and grow most of the food raised in Laos.

All mountain areas are thickly forested. The lower reaches are often thick, tropical jungle growth which is virtually impassable except on foot. The upper forests provide the major export of this country, teak.

Climate and Weather

There are two major seasons of the year, the dry season (November through March), and the wet season (May through September). This is monsoon country, and during the wet season average monthly rainfall exceeds 11 inches. In the dry season the average is less than half an inch.

It is always humid in Laos. Temperatures are highest in March, with ranges from 70 to 95 degrees. The coolest month is January, with ranges from 55 to 75 degrees. In some high plateau areas it is cooler year around, and some freezes have been reported in the highest mountains.

Transportation

There are no railroads in Laos. There is a railhead in Thailand just across from the Laotian capital of Vientiane, and rail freight to Bangkok is used often.

There are no paved roads in Laos outside of the capital city. The report on total road mileage ranges from 1500 to 3500 kilometers, but the only "major" stretch is that between the official and the royal capitals. Because roads are cut through jungle and mountain areas, they are overgrown rapidly, they twist and turn, and they are narrow. There are continuous ideal ambush sites. In the wet season most roads become impassable. In the dry season few roads could handle two-way traffic of 2½-ton trucks.

There are several airstrips, but these are seldom anything more than cleared fields. Nevertheless, the best means of travel within the country is by air. A small national airline using DC-3 and DC-4 type aircraft connects the capital with nearby countries.

The Mekong river is navigable, but because of falls and rapids requires several transhipments during the course of its full length. The tributaries are navigable by small native craft during the wet season. All rivers are subject to flash floods in the wet season, thus limiting their use. Except for those which span the Mekong, bridges are incapable of handling heavy vehicular traffic.

Cities

The two principal cities are VIENTIANE, the seat of government, and LUANG-PRABANG, the traditional or royal capital. These are major cities only by comparison with other cities in Laos, but they are two of the three that have electric power. Vientiane boasts a population of 60,000, the largest single grouping of people in the country.

The People

The inhabitants are a mixture of migratory tribes from both north and south. About two-thirds are of Thai extraction and speak one or more Thai dialects. The largest minority groupings are the Mea tribe in the northern hill country, and the Kha in the southern hill country. There are about seven identified tribes, each with its own language. The official language of the country is Lao, but even it has two alphabets. French is used in government circles as a common language. Considerable difficulty has been encountered by Laotian soldiers in distinguishing friend from foe and eliciting useful information.

Roughly two-thirds of the people live along river and tributary lowlands, scattered among thousands of villages which have no means of communication. There are no newspapers, no telephone, no telegraph, no radio station, and very few automobiles. The remaining one-third live in the upper country, some in a startling degree of primitive poverty. It is no shock, therefore, to learn that outside of the capital city few Laotians have even heard of the United States, and even less shock to find that they know little (and care less) of the government's problems. It is enough that they eke out a living for their families.

Military Implications

Fighting within Laos is virtually all a guerrilla-type operation. Large forces are subject to ambush and decimation, or to loss of all logistical support other than airdrop. Centralized control of fighting is impossible. Other problems can be deduced from the description above.

Strategically, Laos is vitally important. Although the average foreigner may "write off" Laos as not worth bloodshed, a look at the map will show wherein that philosophy may be wrong. Capture and control of Laos by Communists would give them these advantages: (1) They could attack Burma from two directions. (2) They would have outflanked South Vietnam. (3) They could move directly into wealthy Cambodia. (4) They could move directly into Thailand, and from there it would be easy to secure the entire Malayan peninsula and thus control all of Southeast Asia. This would give them uncounted wealth, plus free access to the ocean through several excellent port areas. From here, aggression could continue in any direction.

(Editor's note: This article was developed by the staff from many sources, none of them official. It was written 21 March 1961, and at that time the fate of Laos and of world reaction was unknown. No effort has been made to discuss the political aspects, internal or external, other than to cite the strategic value of this area. It was our aim only to present a thumbnail sketch of the country.)

Solution - -
Rifle Platoon in the Defense

(continued from page 7)

Map C shows a solution to the requirements of 2d platoon, Company A, which is taught by the Ranger Department, USAIS. Following is a discussion of factors which led to the evolvement of the solution shown.

Terrain Analysis

The hill mass for which the second platoon is responsible is definitely the key terrain to both the defender and the attacker. Seizure of it by the aggressor would greatly aid the continuation of his attack to the South, as it dominates the terrain to the South. Furthermore, this hill mass would be very difficult to re-capture because fields of fire and observation from the south slope of this hill are excellent.

The draw to the front of the 1st & 2d platoons is passable to both foot troops and armored vehicles. The flat area on the topographical crest of Hill 623 to the rear of the second platoon provides for excellent observation and fields of fire for short distances; however, from this location, we cannot cover the approaches leading into Hill 623. To defend effectively the key terrain, we must be able to cover the approaches leading into it. The Cyclone Road approach and the large draw on the right are the responsibility of the 2d platoon. These approaches can only be effectively covered from positions along the "lip" where the flat ground starts to drop off. Positions along this line have definite advantages and few disadvantages.

Squad Primary Positions

1st Squad, (Left Squad): The 1st squad is deployed generally along the lip of the finger which extends North to the left front across the large erosion ditch. This squad physically occupies about 100 meters and can fire across the front of the first platoon and can cover the Cyclone Road approach to its front. It can cover the erosion ditch and can effectively support the center squad to its right. One automatic rifle (employed by the platoon leader) is located in the left portion of the squad area to support the 1st platoon. The other automatic rifle is located in the right portion of the squad area and fires a principal direction of fire to cover the Cyclone Road approach and can fire across the erosion ditch to support the center squad.

2nd Squad (Center Squad): The 2d squad is deployed along the same general line as the 1st squad; however, a small unoccupied gap exists between the 1st and 2d squads. The large erosion ditch lies within this unoccupied area and the enemy is denied the use of this ditch by an obstacle placed across the narrow portion of it about 60 meters forward of the FEBA. The center squad physically occupies about 150 meters to include the platoon 3.5 inch rocket launcher and one machinegun. The left AR of the 2d Squad covers right side of the finger which is covered on the left by the machinegun. The other AR covers a concealed foot approach to the right front.

3rd Squad (Right Squad): The 3rd squad position starts off on the left along the same general line as the other two squads and then rises a bit higher on the "lip." This squad's position bends slightly to the rear in order to follow the contour of the terrain and so that it can support the center squad on its left and fire across the entrance of the large draw on the right to support the left element of Company "C". Both automatic rifles were employed by the platoon leader. One automatic rifle is positioned in the left flank of the squad to fire across the gap between it and the center squad. The other automatic rifle is employed in the right portion of the squad area and fires a principal direction of fire across the entrance of the draw.

Squad Supplementary Positions

Though not asked for in the requirement nor shown on Map B, supplementary positions for all three of the rifle squads would be selected at the edge of the topographical crest to the rear of the primary squad positions. From these positions, the squads have good observation and fields of fire across the topographical crest of Hill 623, and can cover the flank approaches into the rear portion of the platoon area. Better fields of fire can be obtained on the reverse slope, but the positions would be too far from the primary position to be practical. Supplementary positions should be within 200 meters of primary positions.

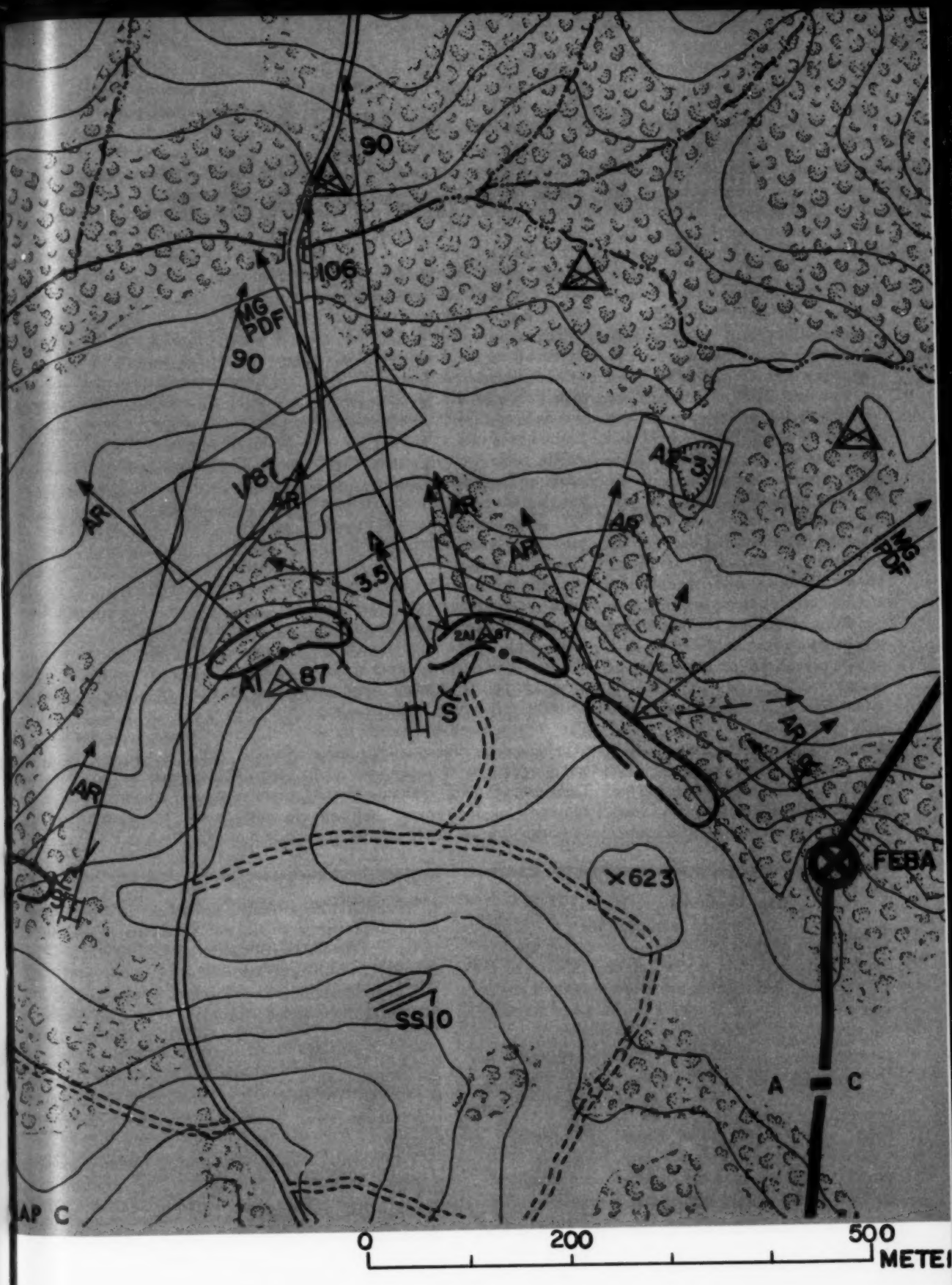
Machinegun Firing Positions

One machinegun is positioned on the left flank of the center squad and fires a principal direction of fire to its left front to cover the Cyclone Road area. Within its sector, it can cover about 15 degrees to the right of the PDF and about 30 degrees to the left, which includes Cyclone Road and the small knoll along the west edge of Cyclone Road.

The other machinegun is positioned in the left portion of the 3rd squad area and fires a PDF to the right front to cover the draw approach and to support Company "C" on the right. Due to the nature of the terrain and the difficulty in obtaining sufficient grazing fire, all the machineguns of both forward platoons were employed to fire PDFs.

Rocket Launcher Firing Position

The platoon rocket launcher is positioned in the extreme left flank of the center squad and fires a PDF to cover Cyclone Road and the open area to the east of Cyclone Road just forward of the FEBA. The fires of this weapon are closely coordinated with the tank employed to its left rear and the 106 rifle to the left


90
106
MG
PDF
90
AR
3
AR
AR
AR
AR
AR
3.5
MG
PDF
AI
87
S
AR
AR
FEBA
×623
SS10
A
C
AP C
0
200
500
METE

of the tank, which cannot cover the bowl in the vicinity of the 4.2 barrage.

Platoon CPs and OPs

The CP-OP is located to the rear of the left portion of the center squad where observation of Cyclone Road approach, a portion of the 1st squad and the major portion of the center squad is possible. From this position, the platoon leader can coordinate the fires of the tank and the 106mm rifle, and can control the major portion of the platoon.

An alternate CP-OP was located on the right flank of the platoon area, and the platoon sergeant will occupy the CP-OP and control that portion of the platoon. If necessary, the platoon leader can move to the alternate CP-OP location.

Employment of the T-1 Weapons Sights

One T-1 sight is employed in the left portion of the left squad, on the automatic rifle placed to fire across the front of the 1st platoon. From this position, observation of the T-1 sight is excellent for its maximum range.

One T-1 sight is employed in the right portion of the center squad to cover the foot approach through the depression to the right front.

The third T-1 sight is employed in the right portion of the 3rd squad with the automatic rifle which fires across the mouth of the draw. This position provides good observation of the draw and the area in front of the left portion of Company "C".

Security Posts Location

The left security post was established along the edge of Cyclone Road on the far side of the crossing site. From there, local security can observe the Cyclone Road approach north of the draw to the front and the open area to the east and west of Cyclone Road.

The center security post was established in the draw to the front of the platoon position. This location provides for security in the wooded approach. Observation is limited.

The right security post location provides for observation of a trail which leads south toward Company "C". Enemy armor could use this trail as a route of entry into the platoon area or into the left portion of Company "C". This location provides good observation of the wooded approach and draw leading into the right of the platoon position.

These local security posts are observation posts during daylight hours and listening posts at night. They are manned by two or three men from each rifle squad and have communications to the platoon. They provide early warning of the approach of the enemy and are withdrawn prior to becoming engaged in combat.

Teaching Points

1. The forward platoon leader organizes his position to take maximum advantage of the terrain and the capabilities of organic and supporting weapons.

2. The rifle platoon organizes the key terrain within its area of responsibility and covers the unoccupied portions by fire, obstacles, observation and surveillance.

3. The rifle squads are employed generally abreast with overlapping sectors of fire assigned in order to provide coverage of the platoon area of responsibility. Supplementary positions are selected to provide all around defense.

4. The machineguns are employed to cover the most dangerous foot approaches into the platoon position. They may be employed singly or in pairs. They may be assigned FPLs and a sector, PDF and a sector, or a sector only.

5. The platoon rocket launcher is used to provide close-in antitank protection for the platoon, and its use is closely coordinated with other antitank weapons located in the area.

6. The platoon leader selects a CP-OP from which he can best control his platoon and observe the platoon area of responsibility. Frequently it will be necessary to select more than one CP-OP.

More Questionnaire Replies

(continued from page 46)

"Thirteen of the twenty-three articles in the Dec-Jan-Feb issue pertain to the primary mission of the Combat Engineers. There are many Engineer officers and EM who would, if they knew of your magazine, subscribe to it." *Major, Corps of Engineers*

"I am an Armor officer, have much service with Infantry, and feel strongly that seven to ten years from now Infantry and Armor will be all Infantry as one and the same." *Captain, Armor*

"As a USAR Officer of Chemical Corps and a C&GS School graduate, I can learn, review, and keep up with what my 18 years of experience taught me, and be current should any future emergencies arise." *Major, Chemical Corps*

"If the Artillery School published a similar magazine, I probably would not subscribe to *Infantry*; but now, only *Infantry* has the scope and polish to be effective with the average soldier." *Captain, Artillery*

"I keep my back issues of *Infantry* for years. It is a fine publication which I promote among my people." *Colonel, U. S. Marine Corps*

"In an expanding and changing field, where tactics and doctrine have not yet been established, *Infantry* is doing an especially fine job as well as performing a necessary service." *Lieutenant, Transportation Corps (Aviation)*

"I note with pleasure the trend in *Infantry* toward a higher level of scholarship, yet the magazine remains eminently readable." *Civilian, General Electric Company*

ICTP-13

A Pattern for USAR Training

Capt Robert A. Sullivan, Inf

A SUCCESSFUL unit commander tailors the training program of his unit to its primary mission. This training principle should apply to USAR, National Guard, and Active Army units alike. Foremost in the minds of USAR commanders of Infantry and Armored units is the task of insuring that their units are in such a state of readiness that deployment to troubled areas can be effected with a minimum of post-mobilization training time.

If an emergency is declared which requires mobilization of selected USAR units, prompt and effective measures must be taken to insure their timely and orderly tactical readiness. A series of 13-week USCONARC Intensified Combat Training Programs (ICTP), aimed at accelerating training readiness, is currently under development for Infantry and Armored Divisions. Personnel and equipment actions, having been planned in advance throughout the various echelons of command, will facilitate implementation of these programs.

Upon declaration of an emergency, Department of the Army will order selected reserve component STRAF divisions to mobilize. These units will be moved to a mobilization station and brought up to authorized strength with trained fillers who have received a minimum of basic combat and advanced individual training. Required critical MOS shortages will be filled from units not scheduled for immediate deployment.

The training cycle is divided into phases to facilitate planning and to ease normal progression from the development of individual skills through division level tactical exercises. These phases are not of specified duration; rather, they are designed to blend into one another to insure a cohesive program. Training in some subjects will be continuous and, although presented in early phases, will be repeated throughout the program.

The objective of the initial phase (5-week supplement) is completion of administrative and logistical requirements while concurrently developing individual, team, and section proficiency to a level which will permit entry into an 8-week period of intensified unit tactical exercises which will mold tactical, technical, and administrative elements into an effective fighting team. During this phase, training will be devoted to individual refresher training, a review of the general subjects, retraining in individual skills, preparation for receipt of equipment and reinforcements, physical hardening, and weapons proficiency. The final two weeks of this phase are devoted to development of teamwork and skills at the squad, section, and crew level. Emphasis is placed on fundamentals of battle drill, crew drill, increased weapon proficiency (to include night firing), battlefield survival techniques, field communication, and control and maintenance of equipment. For technical and administrative units, this phase implements previous training and insures that all personnel know the capabilities, limitations, and maintenance of equipment organic to their team or section. In order to attain proficiency in the minimum practical time, technical training during this phase will consist primarily of on-the-job training.

Most of the final eight weeks of ICTP for combat elements will be accomplished through tactical exercises. These exercises begin slowly at the squad level, then, as smaller elements become proficient, increase to that which would logically be found during actual combat.

Smooth transition into a mobilization program of this type will require detailed planning to include preparation of unit SOPs for activities such as training, supply, administration, personnel, security, and safety. Training committees should be organized within the unit to prepare key cadre for the instructional load anticipated in ICTP-13. Prior planning could include the preparation of lesson plans, methods of instruction courses aimed at accelerating training, perfection of individual specialties, and the development of training directives and schedules to implement ICTP.

This program is not designed as a cure-all for USAR training problems. However, it does represent a sound training goal for commanders. Further, it eliminates the guess-work in planning a training program to facilitate achievement of combat readiness with a minimum of post-mobilization training.

Capt Jack W. Burkheimer

DAVID VERSUS GOLIATH

In January, 1945, in the European Theater, the Third Infantry Division was attempting to pinch the Germans out of the Colmar Pocket. The rifle company of Lieutenant Audie Murphy was holding the line near Holzwihr, France, when it was hit by six heavy tanks and two companies of German infantry. One of the Americans' tank destroyers was hit by an 88mm gun and set afire. The company's positions were overrun by the German armor. Nevertheless, Lieutenant Murphy stayed at his position and directed artillery fire on the attacking Germans. In spite of wounds, he then climbed up on the burning tank destroyer and used its .50 caliber machinegun against the attacking Germans. Although the tank destroyer was hit by two more 88mm rounds, he stayed at the machinegun until the attack was repulsed. He then brought his company forward and consolidated the position. For his heroic deeds at Holzwihr, Lieutenant Murphy was awarded the Medal of Honor.

In his actions we see the two prime requirements necessary for Infantry to fight tanks successfully. The first and most important is that the individual soldier have the courage to stand fast and face these huge, noisy fortresses. To assist him in bolstering his courage, the soldier must know that he has an advantage in his ability to hide from the partially "blind" tank crew. In this respect, it might be helpful if, in training, all Infantry soldiers had the opportunity to ride *in* a tank, seeing for themselves some of the problems and handicaps faced by tankers, both friendly and enemy. This might result in a greater display of courage toward tanks by individual Infantrymen. But there is a second requirement without which all the courage an Infantryman can muster will be useless. He must have weapons which will defeat armor. These weapons might be heavy, large caliber weapons called upon to support the Infantry, or, more ideally, they might be small weapons which can be carried by the individual Infantryman. Given the weapons and possessing the courage, the individual Infantryman

can fight and destroy tanks.

If any battle fought during World War II is representative of the future battlefield as presently conceived, it is the "Battle of the Bulge," more properly known as the German Ardennes Offensive of 1944. This battle was extremely fluid, with large armor columns making deep penetrations through thinly-held American lines. In this battle there were frequent instances in which small groups of ground troops (Infantry, Engineers, service troops) successfully defended critical road junctions against massed armor attacks. In many of these incidents, large German units were considerably delayed or even forced to turn from their planned route. And when they did succeed in overcoming these small groups, they suffered losses which they could ill afford.

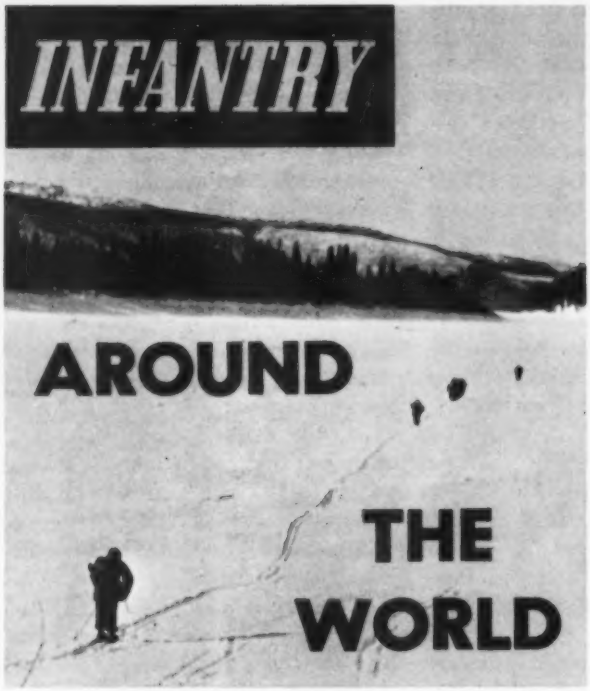
An excellent example of a single individual's successfully fighting against tanks occurred in the midst of the Battle of the Bulge. In December 1944, the 1st Battalion, 38th Infantry, was defending the town of Frinkeldt, Belgium, against the 12th SS Panzer and 276th Volkgrenadier Divisions. The German armor had penetrated into the town and was roaming the streets. Lieutenant Jessee Morrow, the Battalion Communications Officer, peered around an overturned jeep near his unit's command post and saw a German Tiger tank approaching with twelve German riflemen on its deck. He waited until the tank came within fifty yards of him, then raked it with fire from his submachine gun. Half the riflemen fell off the tank; the others jumped off and raced to the rear. Morrow then picked up an M1 rifle, attached a rifle grenade, and fired at the oncoming tank. The tank passed on, then swerved around looking for this bothersome pest. Morrow ran in closer and fired another grenade at five yards range. The tank swerved into the ditch. As it attempted to back out, Morrow aimed carefully and fired another grenade which hit the ammunition racks and set the tank afire. The tank crew jumped out of escape hatches with their clothes ablaze, and the tank was destroyed.

Later in the day, another Tiger tank roared past Lieutenant Morrow, who was still near the command post. The tank ran over a jeep, but in doing so it jammed its turret. In an attempt to free the turret, the Tiger moved to the side of the road and butted a telephone pole with its long 88mm gun. The pole merely snapped, so the tank moved on and butted its gun against another pole, still trying to free its turret. Although the pole again splintered, the turret had worked itself free, and the Tiger spun around and headed directly for the command post.

Reacting quickly, Lieutenant Morrow picked up a rocket launcher, aimed at the rear of the tank, and fired. The tank veered, crashed into a house, and rolled into a ditch, immobilized. A tank crewman stuck his head out of the turret. The 88mm gun slowly started turning toward the command post. Morrow pulled out his pistol and raced toward the tank, firing as he ran. He stopped fifteen feet from the tank; his pistol was empty. In disgust he threw his pistol at the Germans, then dashed around the corner and up an alley. Down the alley came an American jeep with a rocket launcher on it. Morrow grabbed the launcher and dashed back to finish off the tank. However, when he rounded the corner, he found himself looking directly down the barrel of the 88. There was a shattering explosion and Lieutenant Morrow fell, unconscious. When he revived, he was being carried to the aid station. The 88's round had grazed the back of his neck. Later, he learned that shortly after the tank had fired at him, another soldier threw a thermite bomb down the turret and destroyed the tank.

An individual soldier with the courage to stand up to a tank can often overcome the clumsy Goliaths. Furthermore, in the case of Lieutenant Morrow, two 70-ton tanks were destroyed with weapons which most people would not consider adequate. This indicates that perhaps it is not a matter of a weapon's capabilities alone, but how it is employed. In my opinion, the antitank weapons now available to the Infantrymen will defeat any current armor. They might not always be able to penetrate the thickest, front-slope armor, but they *will* penetrate many other parts of the tank. The Infantryman must learn to fire at thin-skinned portions of the tank such as the sides and the rear. Training should emphasize the vulnerable points of enemy armor. Proper training will inspire the Infantryman to have confidence in his weapons, and in his ability to fight the tank.

We cannot become complacent or overconfident about our antitank capabilities, however. Infantry antitank weapons must constantly be improved to negate advances in armor design. Needed is a long-range, extremely light, one-man weapon with greater destruction capability than present weapons, and with a firing system which does not reveal the position of the firer. Design advancements on these items would greatly ease the job of the Infantry tank-killer. Supplied with adequate antitank weapons, Infantrymen will be our most efficient tank destroyers of tomorrow. These individuals must be impressed with the fact that their weapons *will* destroy armor, and, through training, they must gain the courage to fight and defeat tanks. With both of these factors, the Infantry will be able to cope successfully with the fluid and armor-heavy battlefield of the future just as the shepherd boy slew the evil giant on the plains of Palestine so many years ago.



U.S. ARMY, ALASKA

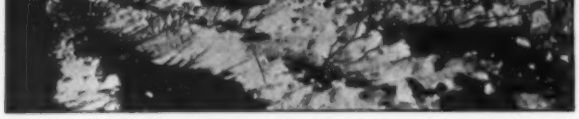
1ST BATTLE GROUP, 23D INFANTRY

ALASKA, America's last frontier. Land of the midnight sun, and state of contrast. Terrain variation of awesome measure. Climate extremes of −50 degrees to +90 degrees. Light conditions never before experienced. What better place to peak train the Army's Queen of Battle—the Infantry!

Within this atmosphere, stationed at Fort Richardson, Alaska, is the 1st Battle Group, 23d Infantry. The members of this battle group have qualifications of all the "elite" backgrounds. There are mountain warfare experts, cold weather specialists, ski troops, rangers, and qualified paratroopers, to mention a few. All are dedicated to upholding a high tradition established throughout the 23d Infantry's outstanding history.

Since its beginning during the War of 1812, the 23d has fought in every major war in which the United States has been engaged. Participation in such battles and campaigns as Manassas, Antietam, Gettysburg, Little Big Horn, Manila, Saint Mihiel, Meuse-Argonne, Normandy, Central Europe and Chipyong-Ni is part of its proud heritage.

The present mission of this battle group is not unlike that of all U.S. Army units: a high state of training, combat readiness, and constant availability to represent power for peace. Its specific mis-



Modern mobility . . .

. . . . as well as older forms of mobility . . .

. . . are stressed in training conducted by "Alaska's Own."

The use of tracked vehicles is a great help in moving supplies over Alaskan terrain.

sion includes the ground defense of Southern Alaska, with emphasis on critical facilities, the most important being Elmendorf AFB, only a few miles from Fort Richardson.

Among the unique training objectives of "Alaska's Own" Battle Group are:

The ability to fight alone, accepting loss of physical contact with friendly units.

Qualifying sufficient personnel in operations on inland waterways to maintain the capability of moving units by river boat.

Maintaining the capability of conducting battle group mountain operations.

There are frequent battle group field exercises, highlighted by Army Training Tests and an annual wide-scale winter maneuver. Emphasis is placed on ground movement via skis and snowshoes. Air mobility, including extensive use of helicopters, is another highlight of training and field exercises.

Long range patrols, performed in both summer and winter, are used to train platoons and companies in intelligence techniques as well as survival.

Another unique aspect of Alaskan service is the special equipment necessary for cold weather operations in rugged terrain. In addition to basic combat equipment and clothing, skis, snowshoes, rucksacks, and thermal boots are added to a long list of complex, but necessary items. Organic ¼-, ¾- and 2½-ton trucks are supplemented with snow travelers, ankios, weasels, otters, and swamp buggies. Survival techniques become reality as well as part of training. A strange jargon replaces or supplements the already technical Army language of today.

It is all not without its humorous side. The folklore and legends of Alaska are part of each new "recruit's" indoctrination. "Ice Worms," switches to control the northern lights, and Eskimo oil soon become well known to the "sourdough" soldier. The outdoorsman experiences a grandeur of wildlife and nature little known to the average man. Alaskan service is truly an experience in itself.

The military strategic location of Alaska is apparent. The Arctic Circle route to our nation begins there. No soldier serving there is without his personal knowledge and understanding of the 23d Infantry's role in keeping and maintaining the world peace at such an important location.

Col Samuel T. McDowell, Inf

MINOR CHANGES--MAJOR RESULTS

Current doctrine on area defense states that "a Battle Group is capable of conducting a defense on ideal terrain, on a frontage of 8000 meters or less with depths of 5000 meters (plus or minus)." A guide of 2000 meters or less is given as the area that a forward rifle company may in turn defend.

A number of officers and noncommissioned officers have expressed concern over a battle group's capability to defend this large an area. "The Battle Group is nothing but an oversized Infantry battalion, yet is expected to hold a larger front than used to be assigned an Infantry Regiment. Impossible!"

Hearing and reading statements similar to this poses the question: What can be done to assist the Battle Group in accomplishing its mission?

The "nuts and bolts" fighting elements of the Infantry Battle Group are its rifle squads and platoons, which have essentially the same firepower they did during World War II. To expect these units to perform more difficult or a greater variety of missions with the same organic firepower is unrealistic. Much has been said about equipping Infantry squads and platoons with weapons of the future. This creates an impression that they will have a "Buck Rogers" capability; but in reality, we should be concerned about this year and next, and provide units with the best weapons currently available.

The current rifle platoon is organized, with one officer and forty-three enlisted men, into a platoon headquarters, three rifle squads and one weapons squad. Each rifle squad is organized with a squad leader and two fire teams, and each fire team is equipped with five M14 rifles having a semi-automatic or automatic fire capability. One of the men in each team is designated as the Automatic Rifleman and is equipped with the M14 rifle, modified; but, in fact, all five men in each team could fire full automatic fire. There are eleven M14 rifles in each squad; a total of 38 in the platoon. The weapons squad is organized with a squad leader, two machinegun teams of three men each, and one two-man rocket launcher crew. This squad has three M14 rifles, two general purpose M60 machineguns, and one 3.5-inch rocket launcher.

This organization appears to be sound. The two fire team principle is ideal for fire and maneuver and permits control by the squad leader both in offense and defense. The weapons squad is also well organized to provide supporting fire for the platoon.

When it is considered that certain weapons have recently been made available to the Infantry, and also that today's rifle platoon has certain limitations, every Infantryman should ask himself this question: can this platoon be better equipped to accomplish its mission?

The M14 rifle uses a 20-round magazine which must be recharged with five-round chargers or exchanged for a different magazine to permit continuation of firing. Recharging or changing a magazine takes time, and in the defense or the attack a difference of one-tenth of a second may mean the difference between life or death.

The Machinegun Committee of the Weapons Department at the Infantry School persists in telling everyone about the M60 machinegun and how good it is. Many excellent firing demonstrations have been presented with this weapon, including an Accuracy Comparative Firing Test with the Browning Automatic Rifle, M15 rifle, M14 rifle (modified), and the M60 machinegun. The BAR was used as the control weapon, and accuracy standards were measured by the military characteristics as written for the BAR (that is, to attain 80% hits in a 40-inch circle—within the number 4 ring of a standard "B" target—at 200 meters, firing in 2-3 round bursts). All weapons were fired on a bipod from the prone position. Six firers were selected, all experts with their respective weapons, and each firer fired 100 rounds from each of the four weapons.

Since the BAR is being replaced by the new modified M14 rifle, and considering the sample firing above, the US Army should go one step further and replace the BAR with a comparable, if not superior, weapon, the M60 machinegun. Empty, the M60 weighs only 3.5 pounds more than the BAR and 12 pounds more than the modified M14. The comparison between the modified M14 and the M60 seems to be significant; however, the weight ratio decreases and moves toward the M60's side of the scale as ammuni-

Name	*Rate	BAR	M15	M14 (AR)	***M60
Firer Nr 1	Slow	95	87	**68	97
	Fast	97			
Firer Nr 2	Slow	97	74	83	83
	Fast	70			
Firer Nr 3	Slow	91	92	87	95
	Fast	99			
Firer Nr. 4	Slow	84	57	84	95
	Fast	95			
Firer Nr 5	Slow	99	55	55	95
	Fast	90			
Firer Nr 6	Slow	97	66	42	93
	Fast	94			
Average Hits per 100 rounds		92.33	71.83	72.17	83

NOTE: *Rate pertains to BAR only (2 cyclic rates: Slow 350, Fast 550)
**68 out of 80 rounds
***One cyclic rate of fire: 550 rounds per minute

tion is added to both weapons. The bipod mount of the M60 is part of the overall weight, 23 pounds, of the weapon. The bipod also permits the machinegun to be used as an individual weapon. The M122 tripod mount can be carried on unit transportation until a defensive situation permits the gun to be mounted on it. Concerning ammunition for the machinegun, the gunner can carry 200 rounds in two bandoleers, and additional bandoleers (as required) can be carried by other members of the fire team. During extended foot movements, the fire team may rotate the weapon and ammunition among other members of the team to reduce fatigue.

There are certain disadvantages; however, the advantages of having a machinegun in a fire team will outweigh all the disadvantages enumerated against this proposal.

Here are several specific advantages gained by having the M60 in a fire team:

1. Increased Accuracy: The M60 is significantly more accurate than the M14 rifle (modified).

2. Greater Range: The maximum effective range of the M60 is 1100 meters, compared to 460 meters for the M14 (modified).

3. Increased Sustained Fire Capability: The sustained rate of fire for the modified M14 rifle is 15-20 rounds per minute, compared to 100 rounds per minute for the machinegun.

4. Uninterrupted Fire: The machinegun uses a 100-round bandoleer. The M14 uses a 20-round magazine.

5. Ease of Reloading: The M14 rifle must be recharged with chargers or exchanged. A machinegun bandoleer can be attached and the weapon loaded in approximately the same, and often less, time than it takes to exchange the M14 magazine. Recharging a magazine takes more time than exchanging one.

6. Increased Fire Power: Using an educated estimate, it is believed that the fire power of the rifle squad would be increased by 300 per cent.

7. Training Time Is Saved: Units conducting Advanced Individual Training with the Browning Automatic Rifle now use Army Training Program 7-17. This program allocates 56 hours and 582 rounds of ammunition to conduct the BAR qualification course. Adoption of the M14 (modified) will permit a reduction of 10 hours in future training by eliminating mechanical training. It is anticipated that the future qualification course with the automatic rifle still will continue, even though training may be modified slightly. In addition, Army Training Centers train each soldier (MOS 111) in a 70-hour machinegun qualification course, and Active Army and Reserve units conduct a 16-hour machinegun familiarization course in addition to the regular qualification course. Placing a machinegun in each fire team would eliminate *time* and the *ammunition consumed* in training soldiers with the BAR or M14 (modified). This change in Army Training Programs would amount to a savings of time and money, both of which are valuable commodities.

A machinegun in each fire team will not affect the fire team principle of the rifle squad; training time and ammunition will be saved and each fire team will have a proven automatic weapon with all the desired military characteristics as its nucleus of fire.

By making the suggested weapons change, the rifle platoon will have an unprecedented amount of firepower that can be used against enemy personnel and armor. It would be able to attack, defend, and move with unquestionable results.

This article proposes ideas which probably will be tested soon. The test will include consequences of a matter which may stand out at once — the increased logistical weight of such a change with each rifle company. At the moment this is not a USAIS position article.

COL MCDOWELL, a graduate of the Army War College, was commissioned at Clemson College in 1932. He served as a battalion commander during World War II and then as Deputy Chief of Staff, Operations, USARPAC. After serving as Commanding Officer, 15th Infantry, 3d Division, he became Director, Weapons Department, USAIS.

WHAT'S NEW FOR INFANTRYMEN

M151, ¼-TON UTILITY TRUCK

The ¼-ton utility truck, M151, designed as a general purpose personnel, cargo or weapons carrier, is currently being issued to Army units. It is designed for use over all roads and has a cross-country capability under all weather conditions. It is capable of performing all the tasks of its ¼-ton predecessors.

In addition, there are some innovations built into the vehicle which add to its capabilities and reduce its requirements for maintenance. Built of aluminum with each wheel individually suspended for more maneuverability and ease of cross-country driving, the vehicle has a low hood and low fenders for better visibility. The engine and accessories are mounted for ease of maintenance and replacement of parts. There is no low range, but optional selection of front wheel drive has been retained. No low range is needed since an extra low gear in the transmission eliminates its need. (There are four forward speeds).

There are also some added extras for driver and passenger comfort. Featured are large, comfortable, and adjustable seats, more leg room, and vents to cool the cab during hot weather.

NEW CARGO AIRCRAFT

The Air Force and the Federal Aviation Agency have jointly announced the initiation of an Air Force program for the development of an all-cargo aircraft designed to meet civil standards and fulfill the needs of both the military and commercial carriers.

The program will involve development of a long-range transport with a maximum cargo capacity of 70,000 pounds and a capability of taking off fully loaded from a 6,000-foot runway.

The new plane is to be powered by turbofan jets and will feature truck-bed height loading. In the military version, it will also have provisions for air dropping parachute troops and heavy equipment.

Other specifications are a 20,000-pound cargo capacity for trans-Pacific and a 50,000-pound cargo capacity for trans-Atlantic flights.

ABLE ORIENTOR

A quick azimuth determination to emplace artillery pieces can now be made by using the ABLE Orientor (Autonetics Base Line Equipment), a portable, gyroscopic direction finder now in production for U. S. Army artillery battalions. With this compact artillery orientor, base lines can be established in minutes rather than the hours or days sometimes required by conventional surveying methods. Basically a precision gyrocompass, ABLE determines true north to less than 30 seconds of arc in less than 20 minutes operating time.

MONTHLY LIST OF INSTRUCTIONAL MATERIAL

The Monthly List, reproduced here as a reader service, is an official publication of the Infantry School, and is produced to facilitate coordination of Infantry doctrine among Army service schools and to offer Infantry School instructional materials to Army agencies which conduct, support or monitor school-type instruction. It is distributed under provisions of USCONARC Regulation No. 310-2, 30 August 1960. Each authorized addressee is furnished one gratuitous copy of any listed item specifically requested for official use.

Items preceded by asterisks may be purchased from the Book Department, USAIS, Ft. Benning, Ga., at prices indicated, by any member of the U. S. Armed Forces who so identifies himself when ordering. Requests must include name and address of the military unit to which assigned or attached, and a statement that the material will not be re-sold or otherwise released to individuals not assigned to the military establishment or to agencies not an integral part of the military establishment. Mail orders must be accompanied by full remittance, including postage surcharge. Orders will be mailed to the requester through his unit.

Items without asterisks are produced for resident instruction at the Infantry School and are not available for purchase. However, a unit or agency having a strong official need for any item may request a gratuitous copy from the Editorial and Pictorial Office, USAIS, Ft. Benning, Ga. Requests must state the purpose for which the material is needed and must include the official title and unit or agency address of the requester. Properly justified requests will be filled as long as the supply lasts.

Infrared Equipment and Sniperscope Firing, 1181N-USAR(ADT). Placing the sniperscope into operation, familiarization with it, use of auxiliary infrared light sources and use of infrared equipment.

***Marksmanship Training, M1 Rifle and BAR**, 1185-USAR(ADT). Trainfire I Rifle Marksmanship Course, range procedure and methods of instruction to include preparatory marksmanship training, zeroing, field firing, target detection and conduct of the record proficiency test. Lightweight rifle system (M14), new developments in rifle marksmanship and automatic rifle training with emphasis on recent changes in methods and techniques. $.20

***Night Vision**, 1222-USAR(ADT). Integrated conference, demonstration and practical exercise to familiarize the student with construction of the human eye, under conditions of low illumination, by applying the principles of night vision. $.20

***Daytime Instruction Firing**, 1224-USAR(ADT). Integrated conference and demonstration of the principles of night firing with the M1 rifle; emphasis placed on the correct firing techniques and a practical exercise applying the techniques taught. $.15

Application Night Firing, Rifle (Individual), 1226N-USAR(ADT). To develop in the student an understanding of the effectiveness of night firing.

***Technique of Rifle Fire (Day)**, 1244-USAR(ADT). Range determination, characteristics of rifle and automatic rifle fire, application and control of squad fire, and familiarization with the purpose of field target firing to include the organization and construction of a field target firing range. $.30

***Technique of Machinegun Fire**, 1362-USAR(ADT). Review of the characteristics of fire, classes of fire, fire commands, methods of engaging field targets, final protective lines, sectors of fire, range cards and command inspection techniques with 7.62.mm and caliber .30 machinegun. Caliber .50 machinegun in ground role. $.35

***Introduction and Concept of Leadership**, 2093-USAR (RDT). Responsibility and traits of a leader; leadership principles; actions and orders; the evaluation of leadership in terms of morale, discipline, esprit de corps, and proficiency; and the goal of the commander—combat effectiveness. The importance of understanding the psychological factors which affect human behavior. $.25

***Commander-Staff Officer Problems**, 2094A-USAR-(RDT). Integrated conference and practical exercise to present a leadership problem-solving process; functional organization, chain of command; senior-subordinate relationship to include staff relations with subordinates; span of control; and counselling. $.25.

***Leadership Problems of Command in Training and Combat**, 2095B-USAR(RDT). Integrated conference and practical exercise designed to develop leadership problems at the company level to include: mental and physical conditioning for combat; control of fear, rumor, and panic; the development of firepower; restoration of combat effectiveness; development of a positive attitude in junior leaders; and the commander's leadership problems in an isolated situation. $.25

***Leadership Problems of the Battle Group Commander,**

SUBSCRIPTION FORM

BUSINESS OFFICE, INFANTRY MAGAZINE
EPO, USAIS FORT BENNING, GEORGIA

INFANTRY

PLEASE CHECK APPLICABLE BOXES:

☐ $10.00 3 YEARS
☐ $ 7.00 2 YEARS
☐ $ 4.00 1 YEAR
☐ REMITTANCE HEREWITH
☐ BILL ME
☐ NEW
☐ RENEWAL
☐ CHANGE OF ADDRESS
FOR FOREIGN POSTAGE (NON-APO) ADD 60¢ PER YEAR

☐ ACTIVE ARMY
☐ USAR
☐ NG
☐ USMC
☐ USMA ROTC OCS
☐ OTHER

SEND INFANTRY MAGAZINE TO THIS ADDRESS: (Please Print)

Rank Name Service No.

Unit or Street Address Arm/Branch

APO or City State or Country

IF ON ACTIVE DUTY PLEASE GIVE US A TRACER ADDRESS HERE

(Name of person who can always furnish your current address)

Street Address

APO or City State or Country

IMPORTANT: For Better Service Fill Out Completely

These Space for Office Use Only

BR	
COMP	
TYPE	
EXP	
ENT	
SRC	
AGEN	
LOC	
SUBS	

2096A-USAR(RDT). Integrated conference and practical exercise designed to develop leadership problems at the battle group level to include: restoring lost momentum in the attack; development of a positive attitude in subordinates; evaluation of combat performance; battlefield appointments; handling of attached allied units; and public information in combat. $.40

*Civil Affairs, 2233-USAR(RDT). Conference covering civil affairs functions and activities to be performed at battle group, division, corps, and army level; mission, staff and unit organization, functions, policies and procedures for the conduct of civil affairs and relationship with civilians as prescribed by Geneva Conventions, 1949. $.25

*Administration of Military Justice, 2235-USAR(RDT). Conference covering review and actions by the battle group on records of trial by summary and special courts-martial. Practical exercise on reviewing record of trial by special courts-martial. $.25

Medical Service, Infantry Division Battle Group, 2313-USAR(ADT). Integrated conference and demonstration covering the organization, functions, and employment of the medical service of the Infantry division battle group; collection, treatment, and evacuation of casualties through medical installations to include the method of employing air and ground evacuation means; and medical organization and support at division and field army levels as they are related to battle group medical service.

*Staff Organization and Procedures, 6040-A4-USAR (RDT). The purpose, organization, and duties of staffs, stressing the staff and its relationship to the commander, to commanders and staffs of higher and lower units, and the relationship between and within general, unit, and special staffs. $.50

*Organization of the Airborne Division and Armored Infantry Battalion, 6051-A1-USAR(RDT). Conference on the organization and equipment of the airborne division and the armored infantry battalion; emphasis is placed on the organization and equipment of the airborne battle group. $.15

*Counterintelligence Planning, 6234-A1-USAR (RDT). Integrated conference and practical exercise covering counterintelligence planning and safeguarding military information. $.20

Intelligence Training, 6244-A1-USAR(RDT). Conference covering the responsibilities and procedures employed in intelligence training; emphasizing the building of intelligence consciousness and the importance of integrating intelligence training with individual and unit training.

Battle Group in Defense of Riverline and Relief in Place, 6254-A6. Map exercise covering the following: requests and orders to be issued to collect information needed to answer given EEI; organization of battle group defense; employment of attached units; preparation of portion of operation order; fire support planning; counterattack planning; conduct of defense; counterintelligence; planning for and conduct of a relief in place; communications and logistical plans and procedures for a relief in place.

Battle Group in Attack, 6262-A8. Terrain exercise covering a partly mechanized battle group in the attack. Problem encompasses an evaluation of weather and terrain to include student reconnaissance; planning for the attack to include selection of control measures and employment of reserves; aerial supply and evacuation; casualty reporting; conduct of the attack; fire support planning; employment of attached and supporting units; issuance of fragmentary orders; and action taken after nuclear detonation on elements of the battle group. Integrated into the exercise are requirements on the employment of a rifle company on security missions.

*Advance Sheet, Rifle Platoon Defensive Tactics. $1.00

*Leadership Guide (card) 2099B. $.05

*Handbook, Communication Data, January 1961. $1.10

TRAINING FILMS

The following training films have been approved for release to requesting units:

GF 19-49, Military Police-Observation and Description, 23 minutes.

SFS 9-325, The AVSI 1790-6 Engine—Maintenance Procedure, 15 minutes.

TF 3-3033, Employment of Toxic Chemical Agents—Part I—Offense, 17 minutes.

TF 8-3021, First Aid—Part IV—Resuscitation, Mouth-to-Mouth, Mouth-to-Nose, 23 minutes.

TF 9-2978, Ordnance Direct Support Company Operations—Part I—Operations and Movement, 23 minutes.

TF 10-3020, Delivery of Supplies with Army Fixed-Wing Aircraft—Air Delivery, 23 minutes.

TF 10-3044, The M-1958 Portable Bath Unit—Operation and Operator Maintenance, 27 minutes.

TF 11-2861, The AN/TCC-7 System—Part IV—Initial Adjustment and Lineup of the AN/TCC-8 Attended Repeater, 27 minutes.

TF 11-2862, The AN/TCC-7 System—Part V—Adjustment and Operational Test of the AN/TCC-11 Unattended Repeater, 27 minutes.

TF 11-3001, Central Office Teletypewriter AN/FGC-30—Part I—Description of the Automatic Switching Equipment, 33 minutes.

TF 11-3010, Installation of Field Cable, 21 minutes.

TF 19-3013, Dividends of Discipline, 27 minutes.

TF 44-2976, Nike Hercules SAM Battalion Battery Control Area, Alert Status System Checks and Adjustments—Part II—Tracking Station (U), 21 minutes.

TRAINING LITERATURE

The following training literature has recently been printed by Department of the Army and is available through normal publications channels:

ATP 7-12, Hq & Hq Co, Inf Div BG

ATP 7-19, Combat Support Company, Inf Div BG

ASubjScd 7-17, Infantry Mortar Qualification

On the reverse side of this notice is a subscription form which may be used to give us your new address, to correct our rendition of your present address, or to enter a subscription to *Infantry*. Please use it, addressing it to the address shown on the form.

LOOK AT YOUR ADDRESS LABEL

On your address label you will see a three-digit number. By proper reading of this number you can determine which issue of *Infantry* will be the last one on your present subscription. The first *two* digits show the month, and the last digit shows the year. For example, 031 indicates that the subscriber will receive, as his terminal copy, the March-April issue of 1961. The number 113 would indicate the November-December issue of 1963. By this means, the subscriber will always know when he should resubscribe to *Infantry*, and we will cease sending separate advisories to our subscribers.

U. S. ARMY INFANTRY SCHOOL
Maj Gen Hugh P. Harris
Commandant
Brig Gen L. A. Walsh, Jr.
Assistant Commandant
Col Julian H. Martin
Deputy Assistant Commandant

Departments
Col Willard E. Harrison
Airborne-Air Mobility
Col Richard W. Keyes
Command & Staff
Col Glenn H. Gardner
Communication
Col Paul T. Clifford
Ground Mobility
Col John Bisbing
Non-Resident Instruction
Col Bernard G. Teeters
Ranger
Col Harley T. Marsh, Jr.
Special Subjects
Col Samuel T. McDowell
Weapons
Col Otto R. Koch, Jr.
The Student Brigade

Academic Staff Offices
Col Cyril D. Sterner
Combat Developments
Col William H. Birdsong
Director of Instruction
Col John W. Jackson
Operations
Col Theodore Leonard
Editorial & Pictorial
Lt Col Ted Fuller
Secretary

FOLLOW ME!

INFANTRY ADVISORY BOARD

General G. H. Decker
General C. D. Eddleman
General Clark L. Ruffner
General J. E. Moore
General Herbert B. Powell
Lt Gen G. S. Meloy Jr.
Lt Gen Paul D. Adams
Lt Gen John A. Dabney
Lt Gen Paul L. Freeman Jr.
Lt Gen Lionel M. McGarr
Lt Gen Paul W. Caraway
Maj Gen John G. Van Houten
Maj Gen John S. Upham Jr.
Maj Gen J. F. R. Seitz
Maj Gen Louis W. Truman
Maj Gen J. H. Michaelis
Maj Gen Phillip F. Lindeman
Maj Gen William W. Quinn
Maj Gen Charles E. Beauchamp
Maj Gen F. T. Pachler
Maj Gen Ben Harrell
Maj Gen William C. Purnell
Maj Gen J. E. Rudder

The Lonely Infantry